

National Income and Product, 1929-53

A Review

The national income statistics presented in this report cover a quarter of a century of highly varied economic developments in the United States.

In broad outline, this period embraces the following sequence of events: The precipitous fall from the prosperity of 1929 into the deep depression of the early nineteen-thirties; the subsequent recovery, interrupted by the brief recession of 1938, but then continuing through the remaining prewar years; the tremendous performance of the economy in the prosecution of World War II; reconversion and the postwar boom, with attendant inflationary strains; the mild business recession of 1949; and the rapid recovery of 1950, merging in the latter half of that year into the period of hostilities in Korea.

The national income data provide a detailed statistical description of the way the economy has functioned under these widely diverse conditions. They reveal important fluctuations and long-term changes in the volume, composition, and use of the Nation's output, in the industrial structure through which it is produced, and in the distribution of the resultant income.

The nature of national income statistics is fully described in subsequent parts of this report. The following general summary highlights their major features as a prelude to an analysis of the functioning of the economy and of the path traversed in reaching peak levels of income and production in 1953.

National product: The flow of goods and services

Total output is measured from two principal points of view: As the summation of final products produced by the economy; and as the summation of costs incurred in producing those products. Both of these approaches yield comprehensive measures of economic activity, but the analytical breakdowns to which they most readily lend themselves throw light on different aspects of the economy.

The gross national product measures the Nation's output of goods and services in terms of its market value. When expressed in current prices, this series reflects the total dollar value of production; when expressed in constant dollars to eliminate the influence of price changes, it provides an overall index of the

physical volume of goods and services produced by the economy.

In both current and constant prices, the gross national product is broken down to show its disposition among broad groups of users—consumers, business, government, and foreign countries. The commodity and service composition of purchases by each of these major groups is delineated in considerable detail for the current dollar series and in summary fashion for the constant dollar series.

National income: Earnings from production

Total output is also measured, in terms of the factor costs of producing it, by the national income—the aggregate earnings of labor and property which arise from current production. This measure differs from the gross national product chiefly in that it is computed after deduction of indirect business taxes and of depreciation charges and other allowances for business consumption of durable capital goods.

The national income is broken down by distributive shares, by industry of origin, and by legal form of organization. The first of these breakdowns represents a classification of earnings according to the forms in which they accrue to residents of the Nation—compensation of employees, profits of corporate and unincorporated enterprises, net interest, and rental income of persons. The second indicates the use of economic resources and the contribution to total output by each of a number of industrial subdivisions, as measured by income originating in the respective industries. The third shows an important special aspect of the institutional structure of the economy—the portions of total economic activity (also measured by income originating) conducted by various types of productive units, including corporations, sole proprietorships and partnerships, other private business, government and government enterprises, and households and institutions.

In addition to a summary account showing the national income and product, accounts are maintained for each of the major sectors of the economy. These consist of current income and outlay accounts for the business sector, for persons, for government, and for the rest of the world in its transactions with the United States.

A consolidated saving and investment account for the economy as a whole is also provided. The system of accounts is designed to furnish a description of the economic process in terms of the expenditures and receipts of the various sectors, arranged to show their interactions upon each other. The nature and classification of the transactions recorded for each sector are governed to a considerable extent, of course, by the central objective of measuring total output.

Personal income: Receipts of consumers

Particular interest centers upon the personal account, which covers the activities of the consuming public. On the one hand, it gives total personal income—the current income received by persons from all sources, inclusive of transfers from the government and from business; and on the other, it indicates the disposition of personal income for consumption, taxes, and savings. Personal income is a third major aggregate, generally coordinate in significance for economic analysis with the national income and the gross national product.

In general outline, then, this is the body of statistical information utilized in the following review of economic developments since 1929. While this framework permits a comprehensive study of such developments, it by no means covers all significant elements in the operation of the economy. It does not, for example, provide direct information regarding the monetary and credit system of the United States. In the discussion below, therefore, only incidental attention will be devoted to trends in that field—not because they are lacking in importance, but because they fall outside the scope of the statistics with which this review is primarily concerned. Although a number of other relevant factors are similarly excluded, the picture of the economy in action which emerges from the national income accounts is a highly significant one.

BASIC TRENDS IN THE ECONOMY

Despite the violence of the economic fluctuations which have occurred, the outstanding feature of economic developments over the past 25 years is the tremendous growth of the United States economy.

The population increased by over 30 percent, from 122 million in 1929 to 160 million in 1953, and the number of persons engaged in production rose in roughly similar proportion. This larger work force was equipped with a greatly expanded volume and improved quality of machinery and plant facilities, as well as with such intangible assets as better education and advanced scientific knowledge. Through utilization of these enlarged human and material resources, the economy has been able to produce a vastly increased flow of goods and services, including a wide array of new products.

Growth of the Economy

The gross national product amounted to \$365 billion in 1953, as compared with \$104 billion in 1929. This comparison reflects the combined influence on the current market value of total output of both greatly increased physical volume and much

Chiefly as a result of the inflation associated with World War II and its aftermath, and the Korean conflict, the general level of prices in 1953 was more than two-thirds above that of 1929. After allowance for this factor, the physical volume of the Nation's output, as measured by the gross national product in constant dollars, is found to have risen 105 percent over the period. In terms of real output per capita, the increase amounted to 57 percent. See chart on page 5.

A simple and meaningful comparison of the long-term rate of growth in national production is provided by the average annual percentage increase in constant-dollar gross national product from 1929 to 1953, which were both years of high utilization of productive resources. According to this calculation, the rate of expansion in the real volume of output has averaged over this 25-year period about 3 percent per year.

In part, this growth has reflected the gradual increase of the Nation's manpower resources. The advance in production, however, has outstripped this increase by a wide margin, owing to the achievement of sizable gains in productivity per unit of manpower utilized.

Large advance in productivity

Trends in productivity may best be examined in terms of gross product, excluding that arising in general government because the method by which the contribution of government to constant-dollar national product is estimated makes no allowance for changes in productivity.

With this exclusion, the real increase in output from 1929 to 1953 was almost 100 percent. During the same period the number of persons producing this output—full-time equivalent employees plus active proprietors—rose by 27 percent, or about 1 percent per year on the average. An annual rate of growth in real product per person engaged averaging approximately 1¾ percent is thus indicated.

Moreover, this rate of increase occurred during a span of years in which average hours worked per week in the private economy were reduced by about 10 percent. On a man-hour basis, accordingly, the rise in productivity has been considerably greater. Real product per man-hour was well over half again as large last year as in 1929, implying an average annual rate of increase somewhat in excess of 2 percent.

Many factors influence productivity

It is important to recognize that productivity increases as computed above, although expressed in terms of output per unit of labor input, are attributable not only to labor, but jointly to all of the factors influencing productivity. Foremost among these, undoubtedly, have been the technological improvements and increased amounts of capital equipment utilized by the Nation's industries. Better organization and management of productive operations have also contributed, as have advances in the education, training, and health of the population.

These types of influences affect directly the technical efficiency of particular productive processes. In addition, the productivity measures given above also register shifts within individual industries among products involving varying amounts of output per unit of labor input and, furthermore, shifts of workers between

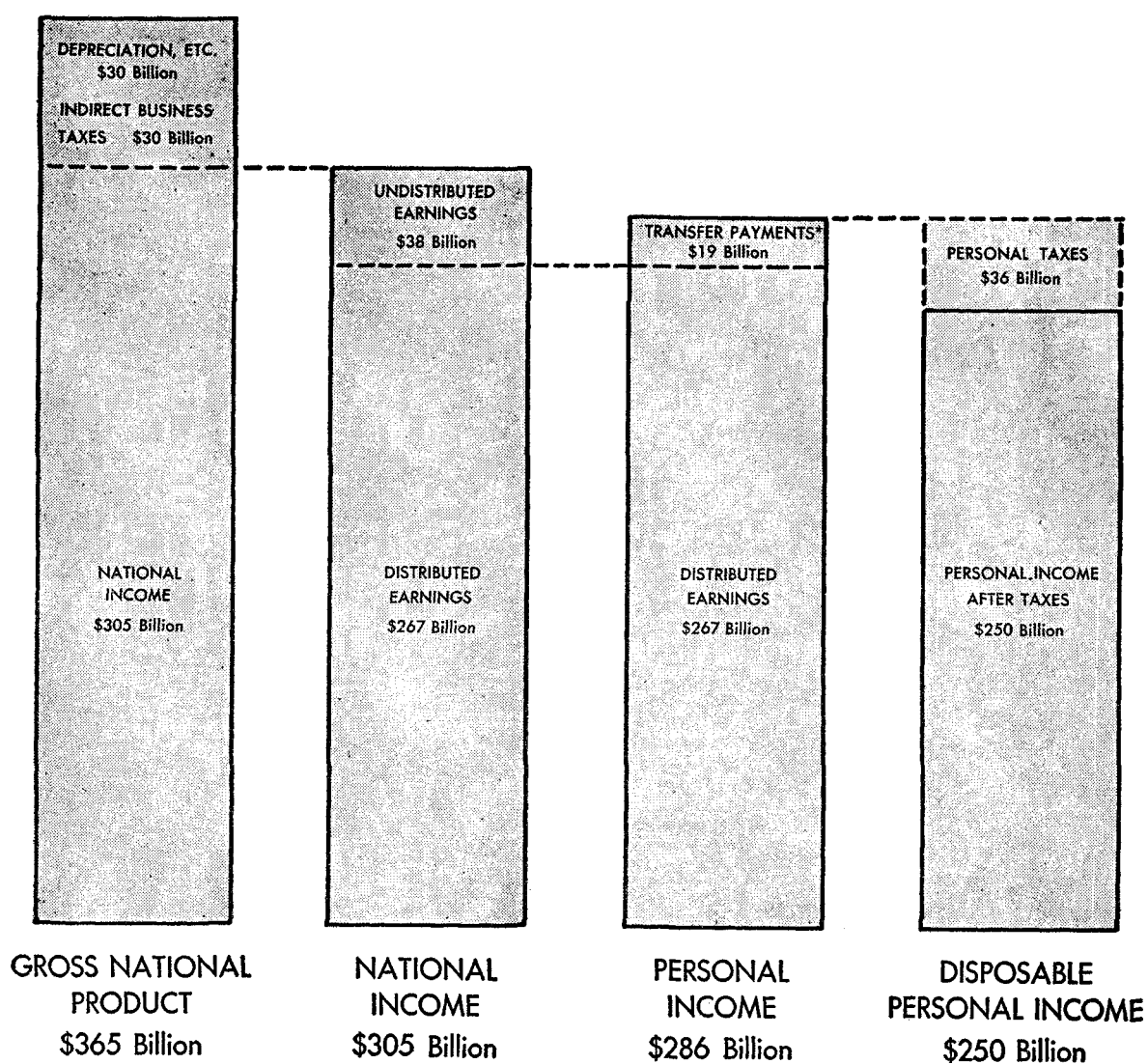
National Output, Income, and Consumer Purchasing Power in 1953

★ Gross national product was 20% larger than national income. It includes in addition depreciation and indirect business taxes

★ Seven-eighths of the national income was distributed as personal income

★ Personal income exceeded national income distributed, as individuals also received \$19 billion in transfer payments

★ After taxes, \$250 billion of personal income was available for spending or saving



*INCLUDING \$5 BILLION OF NET INTEREST PAID BY GOVERNMENT

An appreciable part of the productivity rise since 1929 can be traced to a shift of the latter type. The proportion of the labor force engaged in farming—where real product per man-hour is substantially less than in the private nonfarm sector—has declined markedly and almost continually. This shift of workers to nonfarm industries has in itself contributed about one-fifth of a percentage point to the average annual rate of growth in real product per man-hour, quite apart from the improvement of productivity in each of the sectors separately. Relative shifts of labor among industries within the nonfarm sector have probably affected total productivity in a similar fashion. While information is not available for precise calculation of the effects of these industrial shifts, indirect evidence suggests that in the aggregate they may compare in importance with the farm-nonfarm movement.

Shifts in the Use of National Output

Along with the huge expansion of the gross national product since 1929, there have been significant changes in its disposition among major groups of users and in the composition of purchases by each of these groups.

All major domestic purchaser groups have shared—though to somewhat different degrees—in the increased volume of production. See chart on page 6. Net foreign investment, which measures net purchases of United States output by the rest of the world, is the only principal component of national product to show a decline from 1929 to 1953.

The most notable change since 1929 in the use of the Nation's output is a shift from private to government use. In terms of the current dollar estimates of gross national product, government purchases of goods and services, which absorbed 8 percent of the gross national product in 1929, took 23½ percent in 1953. Personal consumption expenditures, on the other hand, dropped from 75½ percent of the total in 1929 to 63 percent last year. The proportion of the value of output going into investment was reduced moderately from 1929 to 1953.

Percentage Distribution of Gross National Product

	1929	1953
In current dollars:		
Personal consumption expenditures.....	75.6	63.1
Gross private domestic investment.....	15.5	14.1
Net foreign investment.....	.7	-.5
Government purchases of goods and services.....	8.1	23.4
Total.....	100.0	100.0
In 1947 dollars:		
Personal consumption expenditures.....	71.9	64.2
Gross private domestic investment.....	18.0	12.8
Net foreign investment.....	1.1	-.1
Government purchases of goods and services.....	9.1	23.1
Total.....	100.0	100.0

In terms of the constant-dollar gross national product, the shift to government use is similar. It is seen, however, to be at the expense of both personal consumption and of investment, rather than mainly of personal consumption, as indicated by the current-dollar figures. These value and volume relationships are summarized in the table above.

Consumption patterns reflect price shifts

Although the proportion of total national product going to consumers was smaller last year than in 1929, owing to the larger share used for public purposes, the absolute volume of goods and services purchased for personal consumption was, of course,

vastly increased. In terms of constant (1947) dollars, the expansion amounted to 83 percent—a gain of two-fifths in real consumption per capita.

Reflecting also a 59 percent rise in average prices, the dollar volume of total consumer outlays last year reached \$230 billion, as compared with \$79 billion in 1929. The distribution of these outlays by major objects of expenditure shifted markedly over the two and a half decades. Nondurable goods absorbed an appreciably larger share of the consumer expenditure dollar, rising from 47½ percent in 1929 to 51½ percent in 1953, while the proportion spent on services dropped from 40½ percent to 35½ percent last year. Durable goods purchases accounted for about the same proportion (12–13 percent) in both years.

To a very considerable degree, these shifts reflect differential movements of prices for major items in the respective expenditure classes, rather than fundamental alterations of the consumption pattern in real terms. In particular, much of the relative decline in the importance of service outlays has stemmed from the marked lag of rent and household utility charges behind the general upswing of consumer prices in the last decade, while most of the increased relative importance of nondurable commodities is traceable to the considerably above-average rise in prices for food and clothing. The chart on page 7 shows rental outlays in relation to total consumption.

Changes in real spending, however, have also occurred. Such factors as the development and marketing of innumerable new products, increased reliance upon private automobile transportation, and the expanding use of household appliances have induced marked shifts in the pattern of spending for commodities. At the same time, demands for some classes of services—of which the employment of domestic servants is a conspicuous example—have tended to decline or to lag behind the general advance.

Equipment share of investment higher

Gross private domestic investment last year amounted to \$51½ billion, or 14 percent of total gross national product, as compared with about \$16 billion, or 15½ percent, in 1929. In real terms, as shown in the accompanying table, the share of domestic investment in the total was appreciably lower last year than in 1929, the difference in movement reflecting a sharper rise in the prices of capital goods than of goods and services in general. It may be noted that the constant-dollar data take only incomplete account of quality change. Inasmuch as quality improvements in fixed equipment probably exceeded those in other goods and services comprising the national product, the indicated decline in the proportion of real investment would be moderated if adequate allowance for quality change could be made.

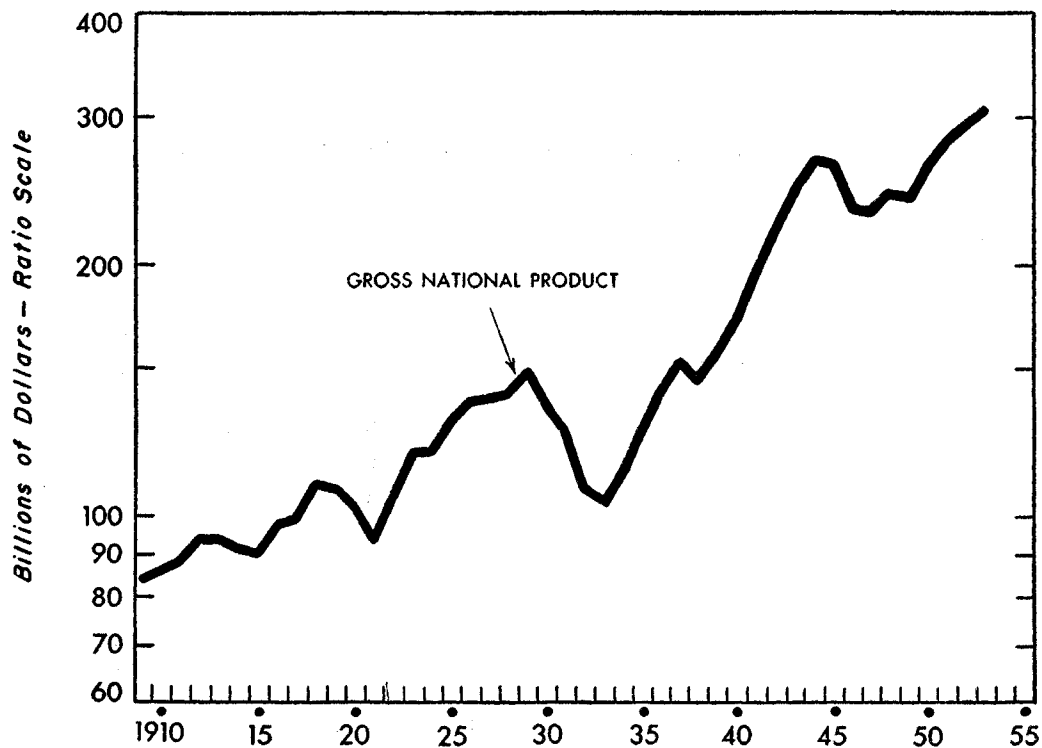
There was a marked shift from 1929 to 1953 in the general composition of investment expenditures. New private construction put in place accounted for about 54 percent of the total in the earlier period, but for only 50 percent last year, while business purchases of durable equipment rose in relative importance from 36 to 47 percent. Net accumulations of business inventories represented 10 percent of total domestic investment in 1929, about three times the 1953 proportion.

The relative decline in construction activity was attributable to the decrease in the proportion of expenditures for nonresidential construction, consisting mainly of outlays for

The National Output

In Constant (1947) Dollars

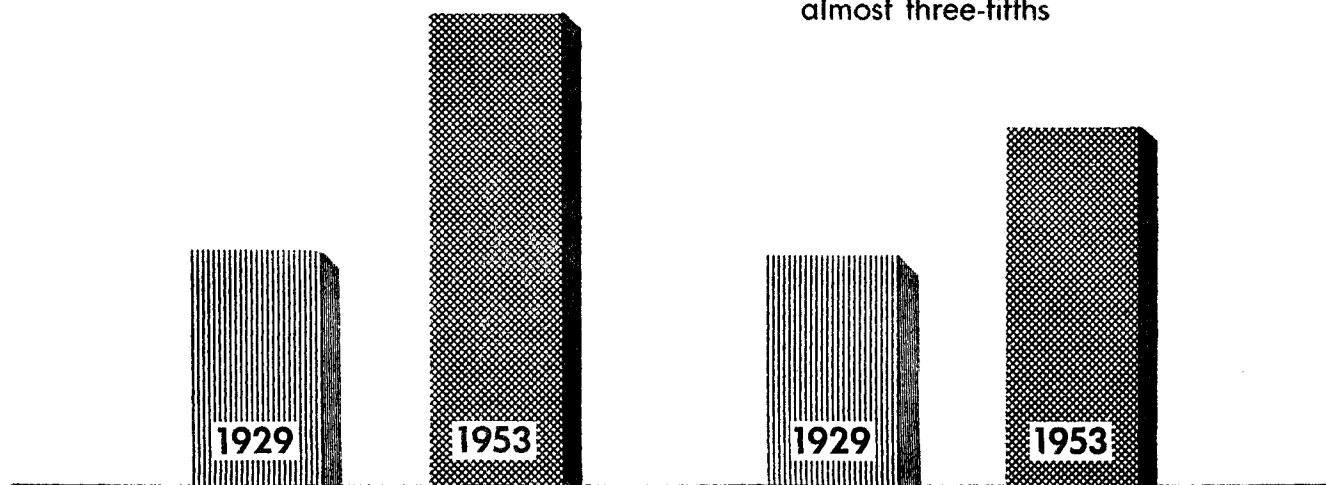
- Growth has averaged about 3 percent per year



- Since 1929

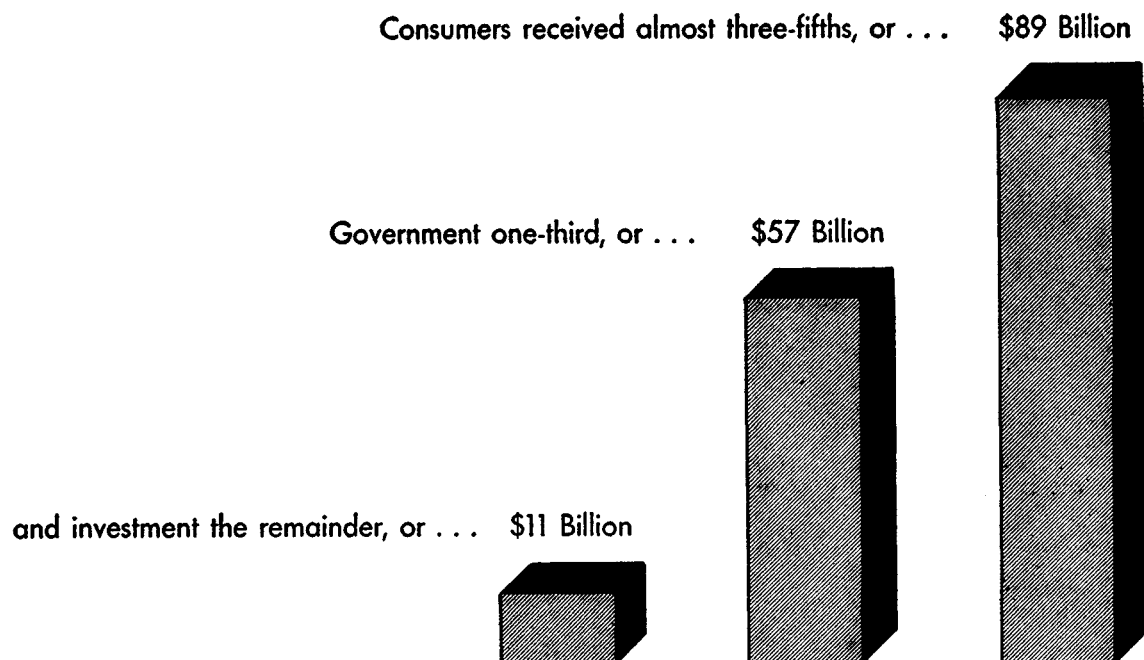
- Real Output has more than doubled

- Real output per capita has increased by almost three-fifths



Distribution of Increased Output – in 1947 Dollars

Of the \$157 billion increase in the total volume of National Output from 1929 to 1953 . . .



business plant. Nonresidential construction expenditures were reduced from 31 percent of gross private domestic investment in 1929 to 26 percent in 1953. In contrast, there was little difference between the two terminal years in the percentage of outlays for new nonfarm dwelling units. Thus, an outstanding feature of the shift in investment was that business expenditures for fixed capital facilities in 1953 were concentrated much more heavily upon acquisition of new equipment, and proportionately less upon plant expansion, than they were in 1929. See chart on page 8. Over the 25-year period, these broad changes in the relative importance of construction and producers' durable equipment were even greater in real terms than in current dollars, since construction costs rose twice as much as equipment prices during the period.

Shift in foreign transactions

Net foreign investment was a relatively minor component of national product both in 1929 and in 1953. In large measure, the shift from a positive foreign balance of \$1 billion to a negative balance of \$2 billion reflects a change in the means by which foreign countries financed their net acquisitions of United States goods and services. In 1953, they obtained large quantities of American exports by grants from the United States Government. Such amounts are recorded in the national income statistics as

Government, rather than foreign, purchases. Corresponding exports in 1929, being then financed through regular commercial channels, entered gross national product under the net foreign investment heading. When allowance is made for this factor, the net flow of United States output to other countries shows a relative increase from 1929 to 1953.

The low ratio of net foreign investment to total production should not, of course, be interpreted as an indication of the importance of international trade to the domestic economy. Actually, its importance is much greater than is suggested by such a net concept. The net balance is a composite of much larger gross flows of United States output into export channels and of goods and services produced abroad into domestic consumption, capital formation, and government procurement. These gross flows in both directions, however, were smaller in relation to domestic economic activity last year than in 1929.

Growth of government purchases

Combined Federal, State, and local purchases of goods and services rose from \$8½ billion in 1929 to \$85 billion in 1953. As already noted, these purchases represented an increasing proportion of total national output. See chart on page 11.

Over the two and a half decades, the entire increase in this proportion was attributable to expanded Federal Government

activities. In the main, the expansion stemmed from the imposition upon the economy of a national defense burden much heavier in recent years than in the prewar period. National security purchases, which constituted less than 1 percent of gross national product in 1929, represented more than 14 percent in 1953.

Part of the increase in the national security outlays of the Federal Government may be traced to the large volume of foreign aid—both military and economic—a type of activity which was nonexistent in 1929. Federal purchases of goods and services for all other purposes combined accounted for only a minor portion of the 1929–53 expansion.

Changes in the Income Flow

Accompanying the expansion of the national output and the shifts in its composition and use since 1929, there have been marked changes in the size of the corresponding income flow, in its industrial origin, and in the form of its distribution to residents of the Nation.

The national income rose from \$88 billion in 1929 to \$305 billion last year—an increase of 250 percent. This rise, of course, reflected not only the expansion of the physical volume of production but also the sharply higher prices prevailing in 1953.

Shifts in industrial pattern

Perhaps the most important of the changes in the income flow since 1929 are those relating to its industrial origin. Such changes are indicative of the way in which the allocation of economic resources has been altered to meet the shifting character of demand for the Nation's output.

Income originating in each industry measures the earnings of the economic resources—both labor and property—utilized by it. Accordingly, the breakdown of the national income by industry of origin provides a measure of the net contribution of each industrial segment of the economy to the total value, at factor cost, of the net national output.

Private nonagricultural domestic industries accounted for about the same proportion (83–84 percent) of the national income in 1929 and 1953. The principal changes in the income originating in the remainder of the economy were in government, which showed a substantial rise over the period, and in agriculture, which declined in relative importance.

Large increase in manufacturing

Industrial shifts within the private nonagricultural domestic sector are illustrated in the chart on page 12, which shows the percentage increases since 1929 in national income originating in several broad groups of industries. Since 1929 and 1953 were both prosperous, full-employment years, this comparison is little affected by cyclical influences. Corresponding data in somewhat greater detail, covering also the intervening years, are presented in the table at the end of Part I.

The most striking feature of the 1929–53 comparison is the large increase in the relative importance of the manufacturing industries. From 30 percent in 1929, their contribution to private nonagricultural domestic income rose to 39 percent last year. This rise is a direct reflection of the increasing degree to which

meet it, has centered upon commodities, including those required for national defense. In general, fabrication and processing of a progressively more complex character have also been involved.

Parallel growth in distribution

Also immediately affected by the relative increase in demand for commodities were the wholesale and retail trade industries, whose share of the private nonagricultural domestic total was 21 percent in 1953, as compared with 18 percent in 1929. This expansion was closely allied with the growth of manufacturing output, the bulk of which is distributed to ultimate buyers through trade channels.

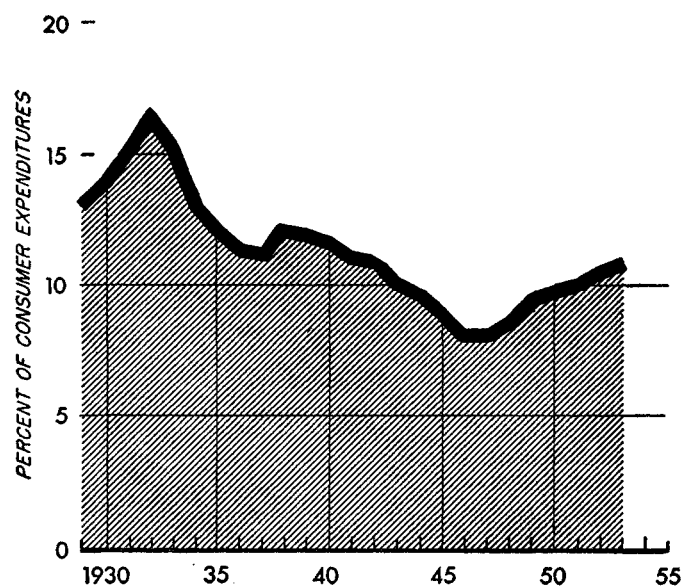
With the relative growth of manufacturing and trade, the percentages contributed by all other private industrial divisions declined except that for contract construction, which advanced from 5 to 6 percent of the total, and communications and public utilities which maintained the same proportion of the total in both years. By far the greatest decline in relative position from 1929 to 1953 was registered in the finance, insurance, and real estate division. Its share, which had matched that of wholesale and retail trade in the earlier period, was down to about 10 percent last year.

Factors in decline of finance group

Two major factors contributed to this drop in the finance group. Earnings in the real estate industry—especially on residential property—were relatively depressed during most of the period,

Rent and Consumer Expenditures

The proportion of rent in total consumer expenditures has risen since the war, but is still lower than in the nineteen-thirties

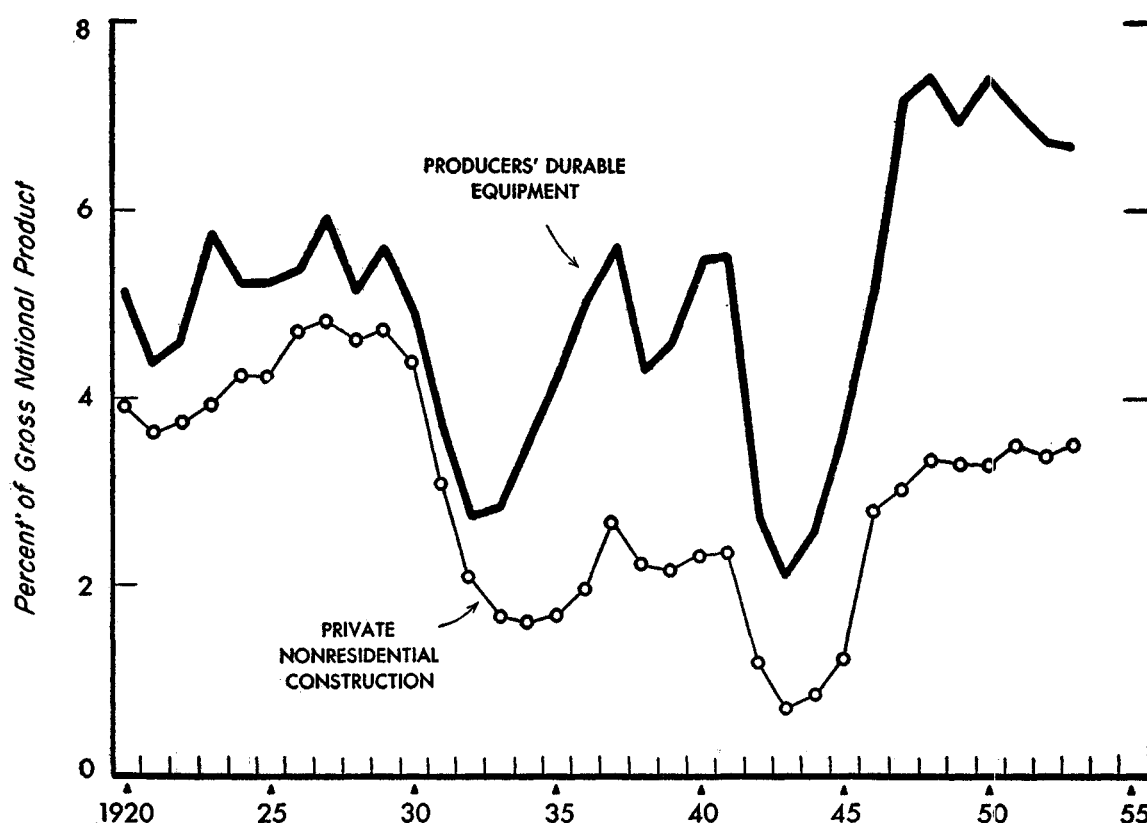


NOTE: NONFARM SPACE RENTS, INCLUDING IMPUTED RENTS

both because the industry was little affected by the growth of commodity output and because rents did not keep up with the

Business Capital Investment

Business has spent relatively more on machinery and equipment than on structures in the postwar period



housing was held down by war and postwar rent controls. It should be noted, however, that most of the relative decline in real estate occurred long before the imposition of such controls. Among the broad factors contributing to it was the necessarily slow adjustment of the supply conditions emerging from the building boom of the 1920's to the depressed housing demand of the prewar decade, when there was a temporary slackening in the rate of family formation and population growth. More recently the industry has been operating in a more favorable economic climate, and rents have risen relative to prices in general since the gradual elimination of rent controls.

In banking and other financial industries, income originating was much lower relative to the total than in 1929, owing mainly to an approximate halving of average interest rates and to the marked shift from external financing of business investment to financing out of retained earnings. The large expansion in public debt obligations held by banks by no means compensated for the fact that the volume of private interest was sharply reduced in relation to total economic activity.

Two other major industrial divisions experiencing fairly substantial declines in relative importance from 1929 to 1953 were transportation and services. The share of the former in total private nonagricultural domestic income fell from 9 percent to 6½ percent, entirely as a result of the much below-average expansion

of the railroad industry. In the case of services, the decrease—from 14 percent to 11½ percent—was centered in the private household segment, where the relative decline of domestic service was the most important factor.

The proportion of income originating in the remaining industry division, mining, was 2 percent last year, about ½ of a percentage point below 1929.

Increase in Federal employment

Outside of the private nonagricultural domestic sector, a significant change over the period under review was the sizable increase in the contribution of government. As a percentage of total national income, it rose from 6 in 1929 to 11½ in 1953. These percentages, it should be emphasized, represent only the return to resources (in this case, labor) directly employed by government and government enterprises—not the production of other industries whose output is purchased by government.

The increase was almost entirely in the Federal Government component, which expanded over the two and a half decades from less than 2 percent to about 7 percent of the national income. The compensation of military personnel accounted for more than half of this growth, and much of the remainder was in civilian payrolls associated with the expansion of the defense establishment.

Income from agriculture

The share of the national income originating in agriculture, forestry, and fisheries, which consists almost wholly of income from farming, amounted to 5½ percent last year. This was much below the 9½ percent contribution of the agricultural sector in 1929. Because of the erratic annual movements which characterize farm income, however, it is difficult to draw significant long-run conclusions from a 2-year comparison of this type.

The decline in agriculture's percentage of the national income from 1929 to 1953 was by no means commensurate with the decrease over the same period in the proportion of the population engaged in agricultural production. Accordingly, the net value of output per person engaged in production rose by about 220 percent in agriculture, as against about 140 percent in the private nonfarm sector.

Changes in distributive shares

Along with the shifts in the industrial origin of the national income, there have been noteworthy alterations of its composition in terms of distributive shares. Some of these alterations have represented fundamental changes in the relative importance of various forms of income as such, while others have merely reflected the influence of industrial shifts in combination with the existing differences among the respective industries as to prevalent forms of organization and characteristic types of income arising therefrom. Both sorts of changes in the distributive-share pattern, of course, are of considerable interest.

This breakdown of the national income is simply a classification of total earnings, before deduction of direct taxes, according to the forms in which they accrue—compensation of employees, corporate and unincorporated business profits, rental income of persons, and net interest. Such a classification, it should be realized, does not reflect the relative distribution of total income among various groups in the population, since many of these have multiple sources of income. Nor do the distributive shares indicate the relative remuneration of the various factors of production in a theoretical sense; most of them include more than one element of factor cost, and each of them represents only a partial measure of the factor cost suggested by its caption.

Over these two and a half decades, there have been marked increases in the relative importance of employee compensation and of corporate profits and parallel declines in the other income shares. The percentage of the total going to proprietors of nonfarm unincorporated enterprises, however, was only moderately lower than in 1929.

Employee share of national income

Compensation of employees rose from \$51 billion in 1929 to \$209 billion in 1953, or from 58 to 68½ percent of total national income. Much of this increase reflected developments which occurred outside the ordinary business system. Income arising outside business firms consists of a series of income flows which originate in wholly unrelated activities. In most of these there is only one type of income, and changes in the relative importance of various income types for the nonbusiness segment combined merely reflect changes in the relative importance of various types

The relative size of these flows has changed greatly since 1929. The more important, and their movements relative to the national income from 1929 to 1953, are: (1) the compensation of government employees, including military personnel, increased sharply. (2) The compensation of domestic servants and employees of nonprofit institutions declined relative to the national income. (3) Income arising from individually-owned property was greatly reduced relative to the national income. This income consists almost entirely of rental income and interest, with compensation of employees minor. Both rental income and interest originating in this sector dropped sharply relative to the national income total. (4) Interest originating in private households showed a relative decline mainly because of the drop in interest paid on loans from brokers. (5) Corporate profits originating abroad (branch profits and dividends combined) increased, while interest received from abroad dropped sharply.

The net result of these shifts was a very sharp rise in the proportion of all income originating outside ordinary business firms which consisted of the compensation of employees. The offset appeared almost entirely in interest and rental income.

Within the ordinary business sector, as well, important changes have taken place in industrial structure and, largely for this reason, in legal form of organization. Since the usual division of income by type varies widely among industries and as between corporate and noncorporate firms, these changes also alter the share distribution of the total national income.

In the important corporate sector of the economy, accounting for more than half of the national income, the ratio of employee compensation to total income originating was substantially stable at about three-fourths of the total in prosperous peacetime years throughout the period from 1929 through 1951. In 1951 (the last year for which final data are available) it amounted to 74 percent as compared with 74½ percent in 1929. It then increased to 76 percent in 1952 and 77½ percent in 1953. Corporate profits in 1952 were adversely affected by the steel strike and in 1953 by the business adjustment that started in the second half of that year.

Some increase in the employee share is indicated by the data to have occurred in unincorporated nonfarm enterprises from 1929 to 1953. Developments in the construction and service industries were largely responsible for this rise. The change in the labor percentage in these two industry divisions reflected mainly a larger increase in the number of wage and salary workers than in the number of self-employed, rather than divergent movements in average employee compensation and average net income per entrepreneur. In agriculture the share of labor income has shown no apparent trend since 1929. Although the 1953 percentage was above that in 1929, it had been lower as recently as 1951.

An additional element stands out in the change in the employee share of national income. This was the internal shift to a somewhat lower proportion of wages and salaries and a higher proportion in the form of supplements to wages and salaries. The latter were an inconsequential element in 1929, consisting chiefly of compensation for injuries. Their growth to significant proportions—3½ percent of national income in 1953—stems from the creation and expansion of the various social insurance programs and from the marked growth in recent years of private

pension, health, and welfare funds. Employers' contributions to these funds, both public and private, are viewed as supplementary compensation of employees.

Shifts in proprietors' and rental income

The advance of entrepreneurial earnings from \$14½ billion in 1929 to \$38½ billion last year was less percentagewise than the rise in national income, due primarily to the relatively small rise in the farm component. As a share of the national income, farm proprietors' income declined from 7 percent in 1929 to 4 percent in 1953. The erratic behavior of farm income makes it difficult, however, to assess long-term trend from this type of comparison. The farm income percentage was markedly above the 1929 figure as recently as 1948, and averaged close to 6 percent in the ensuing three years. In view of the sizable decline in the number of farm proprietors since 1929, the lower percentage share of 1953 represented an improvement in the relative position of the average farmer.

Nonfarm business and professional proprietors' income was 8½ percent of the total last year, about 1½ percentage points below 1929. A rise in the relative importance of the retail and wholesale trade component was more than offset largely by the fact that entrepreneurial earnings in the service industries did not maintain their relative standing.

One of the two distributive shares exhibiting a sharp proportionate decline over the past 25 years was rental income. The \$5½ billion going to persons in this form in 1929 constituted 6 percent of national income, while last year's \$10½ billion represented little more than half that much, percentagewise.

The principal reasons for the diminished importance of rental income in relation to the total are those outlined above in connection with the real estate industry as a whole. It should be remembered, however, that the rental income share—including imputed net rent on owner-occupied nonfarm dwellings—consists only of net rents and royalties accruing to persons not primarily engaged in the real estate business. Other rents are merged unidentifiably with noncorporate business earnings and with corporate profits.

Combined profits and interest share

The corporate profits share of the national income—corporate profits and inventory valuation adjustment—increased from \$10 billion in 1929 to \$38½ billion last year—from 11½ to 12½ percent. This rise was a reflection of the greatly reduced burden of corporate debt, and does not signify a commensurate expansion of the property share of current income. In combination, profits and interest originating in corporate business was fractionally lower in 1953 than in 1929 in relation to total national income. It was down also in relation to total income originating in corporations—the counterpart of the increase in the labor share already discussed. In the main, however, the combined property share of total income originating in corporate business has been fairly uniform in prosperous peacetime years of the period under review. This uniformity is brought out in the chart on page 14, and contrasts with the extreme variability of the property income share during the business cycle.

Influence of inventory profits and losses

The foregoing remarks are based upon measures of corporate profits after inventory valuation adjustment. Profits before tax as reported under prevalent inventory accounting practices, which generally charge goods to cost of sales in terms of prior-period inventory costs rather than current replacement costs, showed a somewhat greater increase from 1929 to 1953. These figures included moderate inventory losses in 1929, when—with prices falling—book costs of goods sold exceeded replacement costs, and included inventory profits last year, when—with prices rising moderately—the reverse was true.

Such inventory profits and losses—which become major elements in book profits in years of sharp price change—are eliminated, in order to secure an economically more meaningful measure of income originating in current production, by application of the inventory valuation adjustment. In effect, this adjustment substitutes the current replacement cost of goods sold for their book cost in the computation of profits.

Because of the very large increase in Federal corporate income tax rates, the percentage of national income taken by such taxes, in combination with similar State levies, more than trebled from 1929 to 1953. The share of profits after tax (including inventory profits) has fallen from 9½ percent in 1929 to 6 percent in 1953. Most of this decline has occurred since 1950 as a result of the increase in taxes during the Korean war period.

One of the salient trends in corporate financing during this period—toward greater reliance upon internal funds—is reflected in the divergence between the terminal years with respect to the disposition of profits after tax. In 1929, 70 percent was paid out as dividends and 30 percent retained, whereas in 1953 only 51 percent was distributed to stockholders and 49 percent was retained. This disparity between the 2 years is reduced if inventory profits and losses are excluded from the comparison. On this basis, undistributed profits rose from 33 percent of profits after tax in 1929 to 46 percent last year. It may be noted that in all but one of the postwar years (1952) the contrast with 1929 in the proportion of corporate earnings withheld and paid out was even greater than in 1953.

Net interest

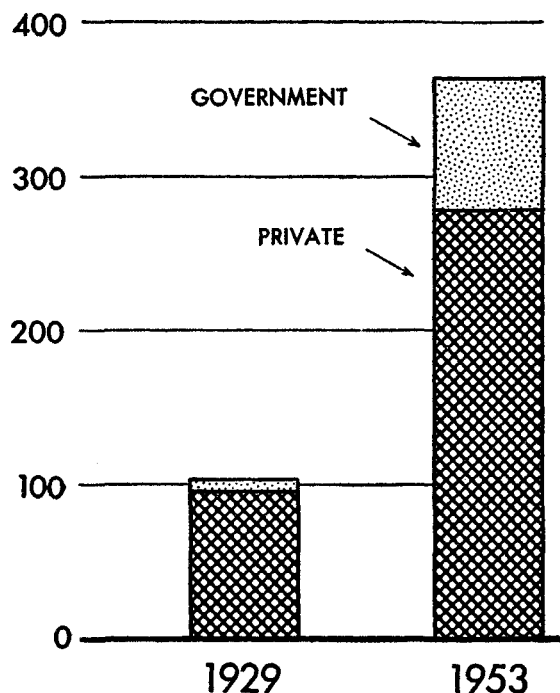
The remaining distributive share, net interest, fell from 7½ percent of national income in 1929, to only 3 percent last year. The major factors underlying this decline are those cited above to explain the diminished proportion of income originating in the financial industries—namely, the virtual halving of average interest rates and the relatively small expansion of private debt since 1929.

In addition, part of the decline is attributable to a statistical peculiarity of the series. To offset the inclusion in business incomes of government interest, which is viewed as a transfer in the national income accounts, government interest received by business is deducted from the interest component of national income. Had the statistically more difficult procedure of deducting it from business incomes been followed, the relative decline in net interest from 1929 to 1953 would have been less, while the other affected shares would have shown correspondingly smaller increases.

GOVERNMENT PURCHASES

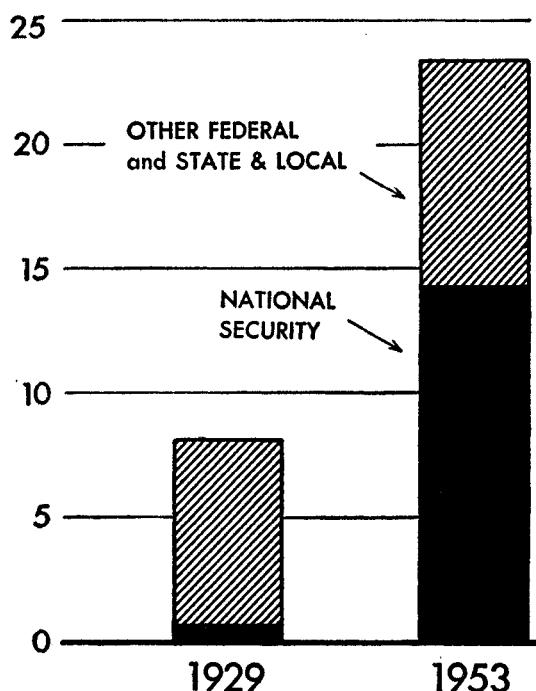
amounted to 23% of the Gross National Product in 1953 as contrasted with 8% in 1929 ...

BILLIONS OF DOLLARS



with the bulk of the increase in the government proportion going for defense purposes

PERCENT OF G N P



Expansion of Personal Income

Personal income differs from national income by the exclusion of those portions of income earned in current production which are not paid out to persons, and by the inclusion of certain items not arising in current production—chiefly transfer payments and government interest.

In 1929, personal income totalled \$86 billion; by 1953, it had mounted \$286 billion. On a per capita basis, the increase was from about \$700 to \$1,800, or more than 150 percent.

Along with this advance in the total, there were significant shifts in its composition. Most of these—the increased relative importance of payrolls and the reduced proportions of interest,

rental income, dividends, and farm proprietors' earnings—have already been noted in the discussion of distributive shares.

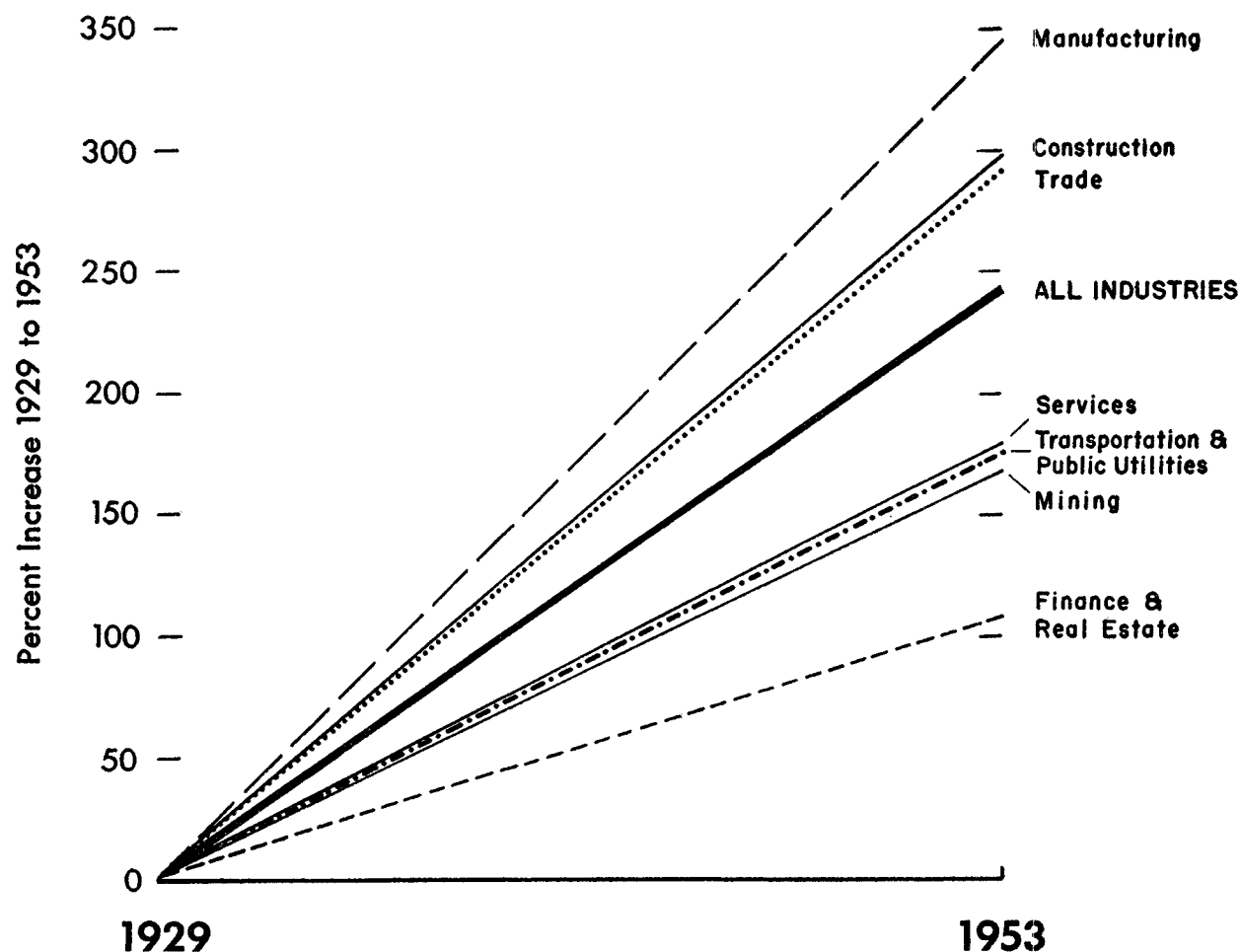
Transfer payments increase in importance

In addition, there have been important changes, stemming from the expanded role of government in the economy, in other elements of personal income. Foremost among these developments is the growth of transfer payments. From \$1½ billion, or less than 2 percent of personal income, in 1929, they rose to \$14 billion, or nearly 5 percent, in 1953.

Most of the rise was in the Federal Government component, which in 1929 consisted chiefly of military pensions and related items. By 1953, as a result of World War II and the Korean war,

Growth in Private Nonagricultural National Income Since 1929

Manufacturing, construction, and trade have shown above-average growth



these payments were greatly enlarged, both absolutely and in relation to personal income, and new classes of veterans' benefits under the servicemen's readjustment acts were flowing in large volume. Moreover, payments from Federal social insurance funds, which in 1929 had been confined to civilian retirement and veterans' life insurance benefits, last year included not only increased amounts under these headings, but also \$4½ billion of old-age and survivors', railroad retirement, and unemployment insurance benefits.

State and local government transfer payments, although overshadowed by those of the Federal Government, have also risen markedly since 1929. State veterans' bonuses have contributed in recent years, but most of the increase has been in special types of public assistance for such groups as the blind, the aged, the disabled, and dependent children. It may be noted that while

these payments are made by State and local governments, they are financed in part by Federal grants-in-aid.

Growth of social insurance contributions

For the personal sector of the economy as a whole, the growth of transfer payments has been partly offset by the concomitant expansion of social insurance contributions. Confined in 1929 to a few public employee retirement systems and veterans' life insurance funds, but since extended by the establishment and development of the various Social Security programs, these now take an appreciable portion of current personal earnings. To date, contributions for social insurance have consistently exceeded benefit payments from the funds—in most years by a sizable margin. On balance, however, the combined effect of social

insurance transactions and transfer payments from general government funds has been a material net addition to currently earned personal income.

Government interest increases with debt

Also of consequence in the expansion of personal income since 1929 has been the sharp increase of government interest payments associated with the tremendous growth, mainly during World War II, of the public debt. Owing to the inclusion of government interest, which is treated in the national income accounts as a transfer item, personal interest income declined much less in relative importance from 1929 to 1953 than did the net interest component of the national income.

Real income up substantially

Each of the elements of personal income is measured without reference to the impact of direct personal taxes. Much of the increase in the total over the past two and a half decades, however, has been absorbed by such taxes. Personal tax and nontax payments amounted to about \$2½ billion, or 3 percent of personal income, in 1929. In 1953 they were 14 times as large, totalling \$36 billion and absorbing about 12½ percent of personal income. See chart on page 16. The relative increase was entirely in the Federal Government component, and resulted almost wholly from the broadened base and sharply higher rates of the individual income tax. State and local personal taxes, although doubling from 1929 to 1953, declined slightly as a percentage of personal income.

After deduction of these taxes, there remained disposable personal income of \$250 billion last year, as compared with \$83 billion in 1929. Corresponding figures on a per capita basis were approximately \$1,570 and \$680, respectively. With consumer prices averaging 59 percent higher in 1953 than in 1929, the increase in real disposable income per capita was thus about 45 percent. See chart on page 19.

The proportion of disposable personal income spent for current consumption last year was lower than in 1929—with 8 percent going into personal saving as compared with 5 percent in the earlier year. However, the true extent of the change may differ somewhat from that indicated by the figures, because the saving estimates are computed as residuals, and hence are sensitive even to minor statistical imperfections in the measurement of disposable income and consumption expenditures.

FLUCTUATIONS IN ECONOMIC ACTIVITY

The substantial growth of the economy, as revealed by the foregoing summary comparison of national income and product data for 1929 and 1953, was extremely irregular. Likewise, the associated changes in the economic structure did not occur in smooth progression, but emerged from a series of fluctuations of unprecedented magnitude, including the great depression and the vast expansion of World War II. In order to illuminate the processes by which the economic scene has been transformed, it is desirable

to trace in a general way the course of economic development during the period under review.

Gross National Product Patterns

Before this summary is given, some of the major factors in the fluctuations of economic activity since 1929 will be highlighted with the aid of two interrelated percentage distributions of the gross national product—one by type of expenditure and one by type of receipt—which are presented in tabular form at the end of this summary.

The distribution by type of expenditure indicates the proportions of total output bought by each major sector of the economy: by persons, by business (for fixed investment and inventory accumulation), by the rest of the world (net), and by Federal, State, and local governments.

The percentage breakdown of gross national product by type of receipt reflects broadly the corresponding distribution of currently-generated purchasing power, exclusive of borrowing transactions. It shows the proportions of the gross income flow received by consumers as disposable personal income; by the business sector in the form of gross retained earnings, including capital consumption allowances; and by all levels of government in the form of tax and nontax receipts net of amounts transferred (such as interest and transfer payments) to other sectors.

Each of these breakdowns of gross national product is of interest in itself, but they provide particularly valuable insight into the functioning of the economy when studied in combination, with the respective expenditure and receipt shares of each major sector paired. Such an arrangement of the data is shown in the chart on page 21.

In each panel of the chart are plotted the percentage receipt and expenditure shares of one of the major sectors, the rest of the world sector being included with the business sector for this purpose. The shaded areas between the lines measure, respectively, the government surplus or deficit; personal saving or dis-saving; and the excess or shortfall of gross investment in relation to gross business saving—each expressed as a percentage of gross national product. It will be noted that the three expenditure percentages, represented by the solid lines, add to 100 in every year, as do the three receipt percentages (dashed lines), except for the statistical discrepancy between the estimates of national income and national product.

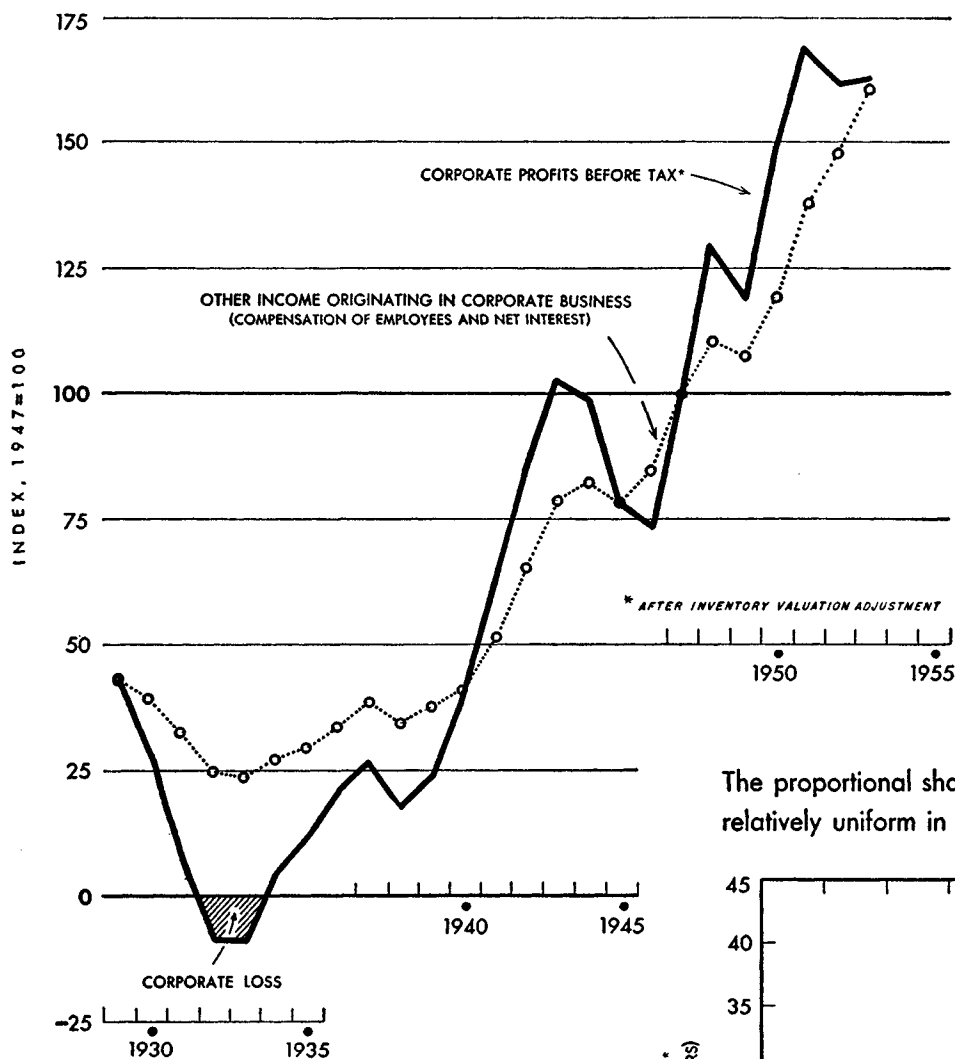
Strategic role of investment

The middle panel strikingly displays the strategic role of investment expenditures in the business cycle. Clearly depicted are their disproportionate collapse in the great depression and their gradual rise in relative importance, briefly reversed in the 1938 recession, during recovery. Also illustrated is the severe cut in private capital formation required during World War II and its resurgence afterwards. In connection with the wartime figures, however, it should be remembered that sizable installations of plant and equipment undertaken directly by the Government are reflected in the bottom panel rather than as business investment.

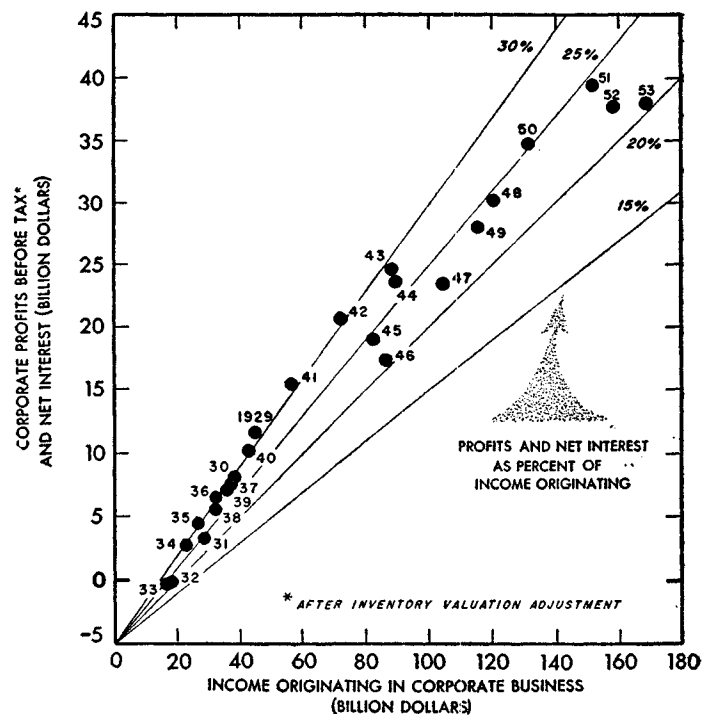
The uniformity of the proportions of output going into investment in prosperous peacetime years is noteworthy, as is the contrast between these proportions, all in the neighborhood of 16

CORPORATE PROFITS SINCE 1929

Profits fluctuate more than other income originating in corporate business



The proportional share of profits and interest is relatively uniform in prosperous peacetime years



percent, and the limitation of investment to 2 or 3 percent of the gross national product at the bottom of the depression.

Gross business saving, while also showing a disproportionate swing in the major business cycle, has been a great deal steadier than investment, reflecting the relative stability of depreciation allowances. In the expanding United States economy, gross business saving has usually fallen short of gross investment. Apart from the World War II period, this has been true in all years except those of the great depression and 1938. The financing of the excess of investment has required funds made available by the other sectors, including those left on deposit with banks, as well as those provided through purchase of stocks or bonds.

Cyclical stability of consumer spending

The percentage of output bought by consumers—charted in the top panel—has exhibited a contracyclical tendency, as attested by its rise from 1929 to 1932, in 1938, and in 1949. It should be remembered, of course, that these were rising proportions of a diminishing total output. Except in the mild recession of 1949, they represented declining physical volumes and dollar values of consumption expenditures in absolute terms. Conversely, falling percentages are observable in most years of peacetime expansion in economic activity. These, however, have been associated with increases in the absolute volume and value of consumer spending.

Another outstanding feature of the top panel is the broad picture it gives of the characteristics of consumer finances during World War II. Disposable income was reduced by heavy taxation, but consumption expenditures were cut far more by the diversion of productive resources to war use, in combination with price controls and exhortations to save. The resultant extraordinary volume of personal savings is clearly illustrated. This phenomenon was not repeated during the Korean war period, as the proportion of total output diverted to national security use was much more moderate, and was financed largely by taxation.

War generates large Government deficit

The counterpart to these wartime personal savings, as well as to the concurrent excess of gross business saving over investment, appears in the bottom panel of the chart, where the huge World War II Government deficit stands out. Although government purchases reached a peak of about 46 percent of total output, government at no time claimed a commensurate proportion of currently-generated purchasing power. Net government receipts averaged 22 percent of gross national product at their relative maximum in 1943 and 1944.

The difference between the share of output bought by the Government and its share of receipts was financed by borrowing on an unprecedented scale. The inflationary impact of this deficit financing was restrained to a considerable extent during the war period itself, despite scarcities of civilian goods and services, by such factors as price control, rationing, and the willingness of the public not only to buy Government bonds, but also to accumulate other liquid assets. After the cessation of

hostilities, however, the postponed effects of wartime deficit financing contributed to the postwar inflation.

In the Korean war period, net government receipts again mounted to almost 22 percent of the gross national product, but government purchases of goods and services fell considerably short of the World War II peak. Accordingly no comparable deficits were generated in the later period.

It should be noted, especially in connection with the postwar figures, that the relative rise in total tax and nontax receipts of Federal, State, and local governments has been greater than that of the net receipts item plotted in the chart. There has been a material increase in the divergence between these two measures because of the disproportionate expansion of the volume of gross receipts required to finance veterans' benefits, interest on the public debt, and other transfers deducted in deriving the net figures.

Basic expansion in role of government

A final feature of the three panels in combination is the shift from private to public consumption, which has already been noted in the foregoing discussion of long-run changes in the use of current-dollar gross national product. The shift is evidenced by comparison of the top and bottom panels, which show a distinct, although irregular, uptrend in the government share, whether in terms of purchases or of net receipts, together with a generally offsetting long-term decline in the personal share. The latter movement is reflected in disposable income, as well as in consumption expenditures. Primarily, of course, the rising percentage share of government reflects the increasing responsibilities assumed by the Federal Government with respect to national defense.

Neither in gross investment nor in gross business saving has there been any noticeable long-term change in relative importance, despite extreme cyclical and wartime variations.

Chronological Review: 1929-53

The year 1929 marked the end of an era of relatively full employment, business confidence, and general prosperity. Economic activity had been advancing strongly, with only minor interruptions, for eight years.

Business decline: 1929-33

The 1929 downturn, the ultimate causes of which are still a matter of controversy, was most clearly reflected in the collapse of investment demand. Gross private domestic investment dropped about one-third from 1929 to 1930, as new construction and producers' purchases of durable equipment were cut sharply and the accumulation of nonfarm business inventories ceased. Foreign purchases also declined in 1930, although the drop was not reflected in net foreign investment because of a matching reduction in import demand.

With employment and incomes adversely affected by the sharp reduction of investment, consumer purchases also decreased, contributing to the general contraction and inducing still further cuts in outlays for investment.

Consumer purchases, however, held up much better in 1930 than investment demand. The aggregate income flow to individuals shrank less than production and the incomes generated by it, as undistributed corporate profits absorbed a disproportionate share of the over-all decrease in earned income. Also, consumers tended to spend a higher proportion of current income or to dissave in the attempt to preserve previous living standards.

Essentially the same pattern of cumulative decline persisted, and in fact accelerated, during 1931 and 1932. By the latter year, gross private domestic investment had fallen to the very low level of less than \$1 billion, as contrasted with \$16 billion in 1929. The further moderate decline of the gross national product in 1933 was in consumer purchases, where it reflected primarily lower average prices rather than a further decrease in volume.

National product halved in value

Over the entire period of contraction from 1929 to 1933, the gross national product dropped by nearly one-half, from \$104 billion to \$56 billion. At the bottom of the depression less than 3 percent of the Nation's output went into business investment, as compared with 15½ percent in 1929. Conversely, consumer purchases rose from three-fourths of the total in 1929 to five-sixths in 1933. Government purchases, although little changed in absolute

dollar volume, were considerably increased in relative importance by the collapse of private demand.

More than half of the 1929-33 decline in the market value of the national product stemmed from lower prices. As measured by the gross national product in constant (1947) dollars, real output fell by three-tenths.

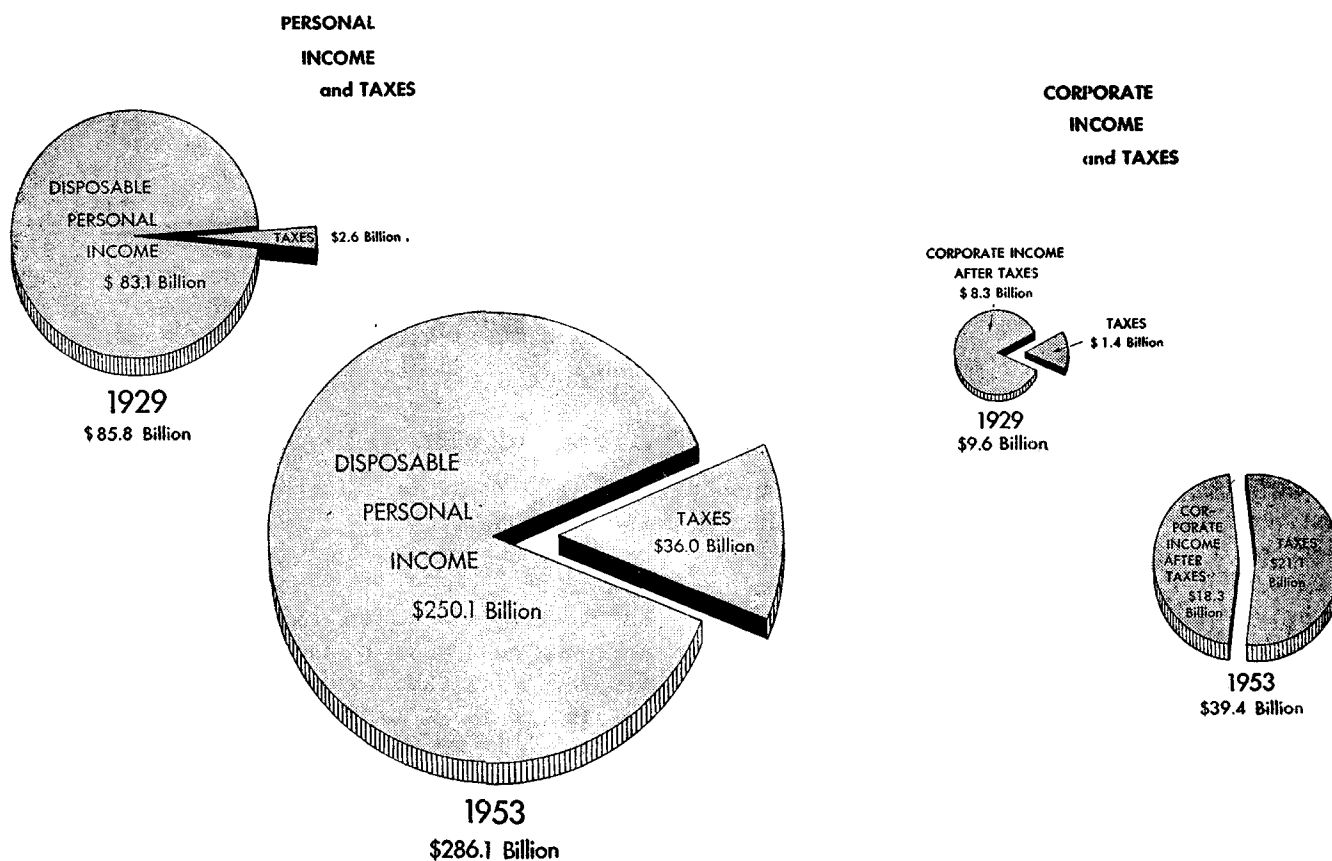
Foremost among the factors underlying the shrinkage of real output was the reduction of employment. At the depth of the depression, the number of persons engaged in production was almost one-fifth lower than in 1929, and unemployment was almost 13 million—close to one-fourth of the Nation's labor force. Moreover, average hours worked per week by those who remained employed were considerably reduced.

Recovery: 1933-37

Some of the most serious deflationary forces underlying the post-1929 collapse were by 1932 beginning to spend themselves. Installations of new plant and equipment had virtually ceased in most segments of the economy, and such gross fixed business investment as did persist represented primarily the fulfillment of minimum replacement needs. As replacements had been cut to the bone for several years, the feasibility of further postponing them was rapidly diminishing by the end of 1932. Business pur-

INCOME AND TAXES

Personal and corporate taxes have taken an increased share of incomes



chases of durable equipment, accordingly, fell no lower in 1933. Private construction activity did continue downward, but the drop was smaller than in any of the three preceding years.

Sizable inventory liquidation continued in 1933, but as it had already carried working stocks close to a minimum even in relation to the low current volume of sales, the rate of liquidation was considerably reduced. It had previously been possible for businesses to meet the sagging volume of sales partly out of relatively excessive existing inventories, with the consequence that production—and hence total income—was reduced even more than consolidated business sales. Now, however, this possibility was vanishing, and it became necessary to keep output at least on a par with current demand. Here too, then, a weighty deflationary force was exhausting itself.

With the marked retardation of income declines stemming directly from reduced investment expenditures, the fall in consumer demand was measurably slowed in 1933. The stage was thus finally set for recovery. It was evidenced in a few industries as early as the fall of 1932, but appears to have dated generally from the spring of 1933. Monthly personal income data show the low point in March, after which there was a slow and uneven rise during the remainder of the year.

With its decline arrested in 1933, fixed business investment turned up moderately in 1934, when both construction and equipment outlays began to expand again. Nonfarm inventory liquidation ceased, and a general trend toward rebuilding of stocks depleted during the depression set in. It was stimulated not only by the emerging recovery of sales, but by the rise in prices already under way during 1933.

Government supplements private recovery

In the meantime, the Federal Government had assumed an active role in the economy, and was making strenuous efforts to promote recovery. Along with the adoption of other measures, it entered the market directly on an expanding scale, especially in its work relief activities, and also provided substantial aid to State and local governments.

With the increase of incomes generated by the pick-up of business investment and the growth of government purchases, personal consumption expenditures also rose in 1934. Their expansion, in turn, fed the income stream and provided stimulus for a further upsurge of investment. This was at first mainly confined to long-deferred replacement of capital facilities which had deteriorated during the depression; but as profits reappeared and business confidence in future prospects was gradually restored, an increasing proportion went into wholly new plant and equipment, and inventories were expanded to meet the rising volume of sales. Residential building, spurred in part by Federal aid to homeowners, moved ahead once more, and total gross private domestic investment advanced steadily from \$1½ billion in 1933 to \$11½ billion in 1937.

Consumer purchases also continued to rise. At \$67 billion in 1937, they were 45 percent above the low mark of 1933. Although their rate of increase was proportionately smaller than that of domestic capital formation, they represented quantitatively the largest element in the upward spiral of employment, production, and incomes.

Apart from the newly expanded role of government, the whole

mechanism of the recovery was thus very similar to that of the downswing, except that it operated in reverse and also more slowly. Of the \$35 billion increase in gross national product from 1933 to 1937, about 30 percent was in private domestic investment, raising it from 2½ to 13 percent of the total. Consumer outlays accounted for about 60 percent of the change—substantially less than their share of total output—and government purchases, dropping slightly in relative importance, absorbed the remaining 10 percent of the increment.

The recession of 1938

Incomplete as was the recovery of the economy by 1937, it was interrupted by a downturn beginning in the latter part of that year and extending through mid-1938. Although of brief duration, this downturn was relatively severe. Within a few months, unemployment rose sharply. Industrial production fell by over one-fourth from August, 1937 to January, 1938, and personal income dropped at a pace comparable to that prevailing in 1931–32. The decline tapered off thereafter, however, and production began to pick up again in the second half of 1938. For the year as a whole, the decrease in gross national product was about 6 percent.

The 1937–38 recession was much steeper in its initial descent than the previous downswing, but it was of a less basic character. Of the \$5½ billion decline in gross national product from 1937 to 1938, almost three-fifths was attributable to a shift from accumulation to liquidation of business inventories. Inventory shifts accounted for only 16 percent of the drop in output from 1929 to 1930.

Business plant and equipment expenditures contracted about as sharply in 1938 as in 1930, but residential construction activity, contrastingly, continued to rise, and consumption expenditures, despite the drop in employment and personal income, declined by only 4 percent, as compared with 10 percent in 1930. The consuming public as a whole sustained its spending close to the 1937 rate by a \$3 billion cut in personal saving. Moreover, the moderate decline in consumer outlays which did occur was very largely counterbalanced by increased government buying and net foreign investment.

Altogether, purchases of goods and services by final users of the Nation's output declined by less than 3 percent in 1938, as compared with 11 percent in 1930, and the major portion of the swing in production was absorbed by the change in inventories. Curtailment of production ceased as soon as the strength of final demand became apparent. The drop in fixed business investment proved to have been instigated by short-run considerations, rather than by any fundamental lack of investment opportunities. The basic underlying situation, in fact, was that large capital requirements accumulated during the depression still remained to be fulfilled, and that many new investment opportunities stemming from technological advances remained to be exploited.

Renewed recovery: 1938-41

Following the jar of the 1938 recession, the recovery was renewed and continued steadily into 1941, when it was merged with the first stages of military preparation for World War II.

All forms of business investment were expanding steadily

during this period. Purchases of producers' durable equipment nearly doubled in dollar volume from 1938 to 1941, and private construction activity also rose strongly. Inventory liquidation ceased in 1939, when production was brought back in line with current sales, and inventories were accumulated on a mounting scale in the next two years.

By 1941, total gross private domestic investment was not far from three times as large as in 1938. For the first time, it surpassed the 1929 total, both in value and in physical volume. Net foreign investment was also sizable in the three years following 1938, being especially stimulated in 1940 and 1941 by foreign demand for munitions and other supplies required for the Allied war effort.

Responding to the increased incomes generated by expanding employment—and contributing, in turn, to the advance of profits, business investment, employment, and incomes—personal consumption expenditures rose from \$64½ billion in 1938 to \$82 billion in 1941. The relative rise was particularly marked—about two-thirds—in outlays for durable goods. Higher prices figured in the advancing rate of consumer spending, but the major portion represented enlarged quantities of goods and services. The real volume of personal consumption per capita increased 16 percent from 1938 to 1941, and exceeded the 1929 figure from 1939 on.

Military requirements become dominant

Government purchases were approximately stable until the latter part of 1940. After the fall of France, the national defense program got under way on a rapidly expanding scale with progressively greater influence upon economic conditions. Throughout 1941 and thereafter it was the dominant factor in the economy.

In this second stage of recovery from the depression, from 1938 to 1941, the dollar value of the Nation's output advanced by almost 50 percent, to \$126 billion. With a general price rise in the neighborhood of 9 percent, the increase in the physical volume of production was close to two-fifths.

The year 1941 was one of marked expansion, and on the average did not represent full peacetime capacity. During much of the year, there were idle manpower resources, as is attested by the fact that the proportion of the labor force unemployed was slightly higher than in 1930, the first year of the depression.

Nevertheless, the degree of recovery evidenced by 1941 was impressive. In constant dollars, the gross national product stood one-third higher than in 1929. This expansion of real output was achieved with an increase of only 15 percent in the total number of persons engaged in production. Moreover, average hours worked per week were reduced considerably over the 12 years. In the private sector, where the increase in output was about 30 percent, total man-hours utilized differed but little from those in 1929.

That so large an increase in the volume of output was nonetheless accomplished was attributable to the rise in real product per man-hour worked in the private economy. Although lagging in the depression, productivity had advanced rapidly after 1934, and by 1941 was near the level indicated by its long-term trend.

The larger output of 1941 was being distributed to major economic groups in a somewhat different fashion from that of 1929. The most noteworthy change was in the share bought by government. With substantial military preparations getting under

way, this share—including a slightly smaller portion for State and local governments—amounted to roughly one-fifth of the gross national product as compared with less than one-tenth in 1929. The proportion purchased by consumers, on the other hand, was reduced from 76 to 65 percent, while the percentages going into gross private domestic and net foreign investment were little changed.

The war economy: 1942-45

Preparations for war began at a time when the economy was operating at less than full capacity, with unemployed labor, plant, and equipment, and an abundance of raw materials. At first, because of the availability of these unused economic resources, war production could be superimposed upon the civilian economy. It acted as a stimulant, and civilian production increased concurrently. Gross private domestic investment proceeded at a high rate, and consumer purchases—especially of durable goods—were buoyant.

During most of 1941, the needs of the war program were thus compatible with expanding civilian production. Moreover, much of the capital equipment acquired during this period later proved to be readily convertible to war production. Also, the additions to the stock of capital, along with additions to the stock of durable consumer goods, subsequently permitted the diversion of more productive resources from civilian use than would otherwise have been possible except with sharper cuts in living standards.

Emergence of war-time problems

As the dimensions of the war effort expanded, however, serious problems emerged. Although the rising volume of war production generated a rapid expansion of incomes, it provided no goods and services to satisfy the resultant growth of civilian demand. Instead, it impinged upon their availability as soon as the slack in the economy had been taken up. Shortages of specific labor skills, capital facilities, and raw materials began to be more and more frequently encountered. After Pearl Harbor, it became obvious that the war program would take proportions of output so huge that they could not be provided by enlarged production alone, and that civilian demand would have to be restricted.

During the period of transition to a full war economy, accordingly, a succession of measures was adopted with a view to ensuring maximum war production together with the optimum functioning of the civilian economy. Rates of taxation were steeply increased, not only to help finance Government war expenditures, but also to restrict the amount of civilian purchasing power available to bid for the limited volume of goods and services remaining after military requirements had been met. Fiscal measures were supplemented by the imposition of direct controls, including priorities, inventory limitation orders, allocations, manpower regulations, price and wage controls, and rationing. In addition, individuals were urged to restrict consumption voluntarily and to invest their surplus purchasing power in Government bonds.

On the whole, the flexibility of the economy in the transition to full-scale war production proved great and total production continued to rise rapidly despite conversion.

War peak reached in 1944

In 1944, the peak year of war production, the dollar value of the Nation's output was \$211 billion—\$85½ billion higher than in 1941. Because of the extreme changes in the nature and composition of output, it is difficult to measure how much of this dollar increase reflected physical volume. According to the constant-dollar gross national product series, the expansion of real output from 1941 to 1944 was more than one-third. Whatever the precise figure, it is clear that there was a large rise in physical production during World War II. The major underlying factors were an extraordinary expansion of the labor force and employment, an increased stock of capital equipment, large-scale operations and technological progress in war production, and a better utilization of labor and productive capacity in many civilian industries.

The increase in physical output was by far the most important source of war output. Next in importance were reductions in gross fixed investment, consumer durables, and government non-war purchases. According to available evidence, real consumption of nondurable goods and of services was more than maintained in total. While the wartime level of personal consumption is somewhat exaggerated in the constant dollar figures because of the impossibility of measuring fully the actual price rise which

occurred during the war, it is evident that, in the aggregate, real consumption was not curtailed.

Although personal consumption held up during the war, it was much lower in relation to income than it would have been in ordinary peacetime years of high economic activity. An unprecedented proportion of wartime incomes was absorbed by taxes, and the saving rate was abnormally high. The latter reflected a combination of restricted civilian supplies regulated by price control and rationing and the response to patriotic appeals for investment in war bonds.

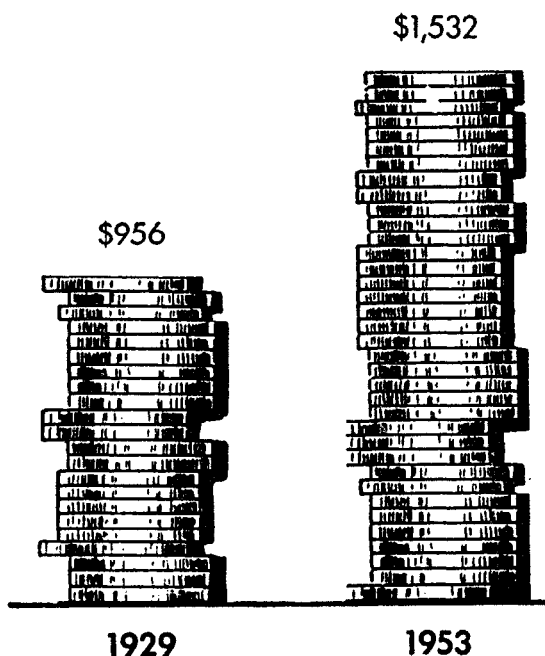
War changes distribution of output

As a result of these wartime changes, the composition of gross national product in 1944 differed drastically from that in 1941. Government purchases amounted to 46 percent of the total in 1944. The comparable figure for 1941 was only 20 percent, including twice as large a proportion for civilian programs of Federal, State, and local governments.

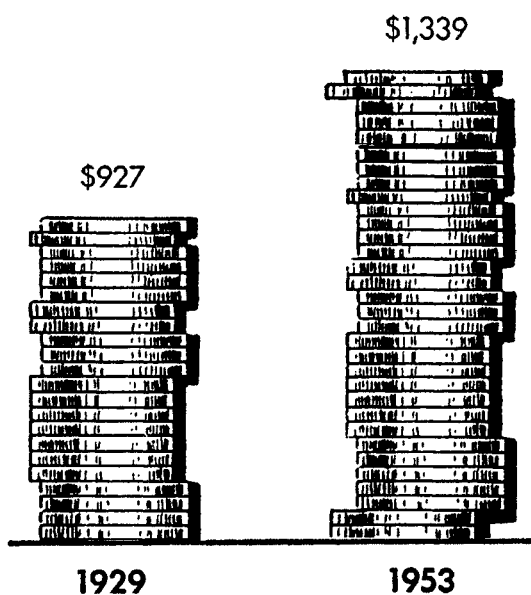
All other major uses of output were reduced far below their usual relative importance, with the sharpest cuts being those in domestic and net foreign investment and in consumer durables. Private fixed capital formation fell to about 4 percent of the national product as compared with 11 percent in 1941; and requirements were also met in part through a net drain upon both

Real Personal Income Per Capita in 1953 ...

was 60 percent above 1929 before taxes ...



and 44 percent above 1929 after taxes



IN 1947 DOLLARS

business inventories and foreign sources of supply. The proportion representing consumer outlays for durable goods was more than halved as compared with that of 1941, and the relative share of personal consumption expenditures for nondurables and services also decreased—though by a much smaller margin.

Reconversion and postwar boom: 1945–48

At the end of World War II, the Nation faced a set of economic problems which in some ways were the counterpart to those of the original mobilization. It was widely recognized that the transition from a situation in which roughly two-fifths of economic resources were being employed in war production to one in which most of the resources would again be devoted to civilian output could only be accomplished in an orderly fashion by widespread cooperation among all major groups in the economy. As in the mobilization itself, the striking flexibility of the economy was demonstrated.

A broad Government program designed to speed reconversion, and to ease its impact upon the returning soldier and upon business, was enacted. With the quick resurgence of business, personal, and foreign demands, as well as the vast Government programs undertaken to aid in the rehabilitation of war devastated areas, the immediate postwar economic decline was held to moderate proportions.

Although war purchases of the Federal Government were cut back with great speed—from an annual rate of \$90 billion in the second quarter of 1945 to \$28 billion in the first quarter of 1946—much of the slack was quickly taken up by the rapid expansion of private spending. Total gross national product dropped 12 percent over these three quarters, or by \$27 billion at annual rates; thus more than half of the drop in war expenditures was offset. Discharged servicemen and war plant workers were speedily absorbed in civilian pursuits, and at no time did unemployment rise appreciably above 2½ million.

After the first quarter of 1946, the buoyancy of private demand more than offset the moderate further declines in government purchases. Strong inflationary pressures characterized the 1945–46 reconversion, even before controls were eliminated, and continued to dominate the economic scene for the next two years.

Influence of liquid saving and backlog demands

Several key factors underlay the strength of private demand. During the war, both consumers and businesses had accumulated an enormous volume of savings—much of it in liquid form. At the same time, they had built up a backlog of urgent demands for all types of civilian goods, and especially for durables.

As regards the purchasing power of consumers, it may be further noted that in the brief contraction from mid-1945 to early 1946 the flow of disposable personal income was maintained. Undistributed corporate earnings absorbed a large share of the swing in total income arising from production, and the Government disbursed mustering-out payments and other veterans' benefits in large volume and lowered the wartime tax rates. Not only did the pent-up demand for durable consumer goods materialize as expected, but an insistent consumer demand for nondurables and services also became an active and powerful force in the economy.

Business speeds investment

At the same time, business plant and equipment investment programs were pushed ahead fast in the immediate reconversion period and continued to expand strongly thereafter. Inventories, very low at the close of the war, had to be accumulated rapidly to bring working stocks into line with the heavy volume of business. The pace of residential building activity also accelerated steadily.

Moreover, net foreign investment assumed a relative importance far beyond its usual role. With financial support provided both by wartime accumulations of gold and dollar balances and by a large volume of United States Government loans, and under the stimulus of world-wide shortages stemming from the impairment of productive facilities abroad, net foreign purchases of American output reached unprecedented proportions.

In combination, these heavy demands placed a severe strain upon the productive capacity of the economy, which was reduced considerably below the wartime peak. Despite low unemployment, the number of persons engaged in production was 7 million, or 11 percent, lower in 1946 than in 1944. This was due to the withdrawal from the labor force of sizable classes of individuals—such as adolescents, housewives, and persons past the normal retirement age—who are not ordinarily employed, but who had been induced by special wartime circumstances to accept employment. In addition, average hours worked per week fell off as overtime schedules were abandoned, and there appears to have been some loss during the reconversion period in real output per man-hour worked in private industries.

Rapid price rise until 1948

With the physical volume of production thus pressing against capacity, much, if not most, of the pressure exerted by intensive consumer, business, and foreign buying was reflected in price movements. Prices were already advancing, though often in covert fashion, in the early reconversion period. After the termination of wartime controls in the latter half of 1946, they spurted up very sharply, and, except for a brief interlude of hesitation in the spring of 1947, serious inflationary tendencies accompanied the postwar boom until 1948.

In that year a better balance between supply and demand emerged, and the price rise tapered off. This was brought about partly through an appreciable expansion of real output and partly through a diminution in the intensity of some of the demands, including those from abroad, from which the greatest pressures had emanated.

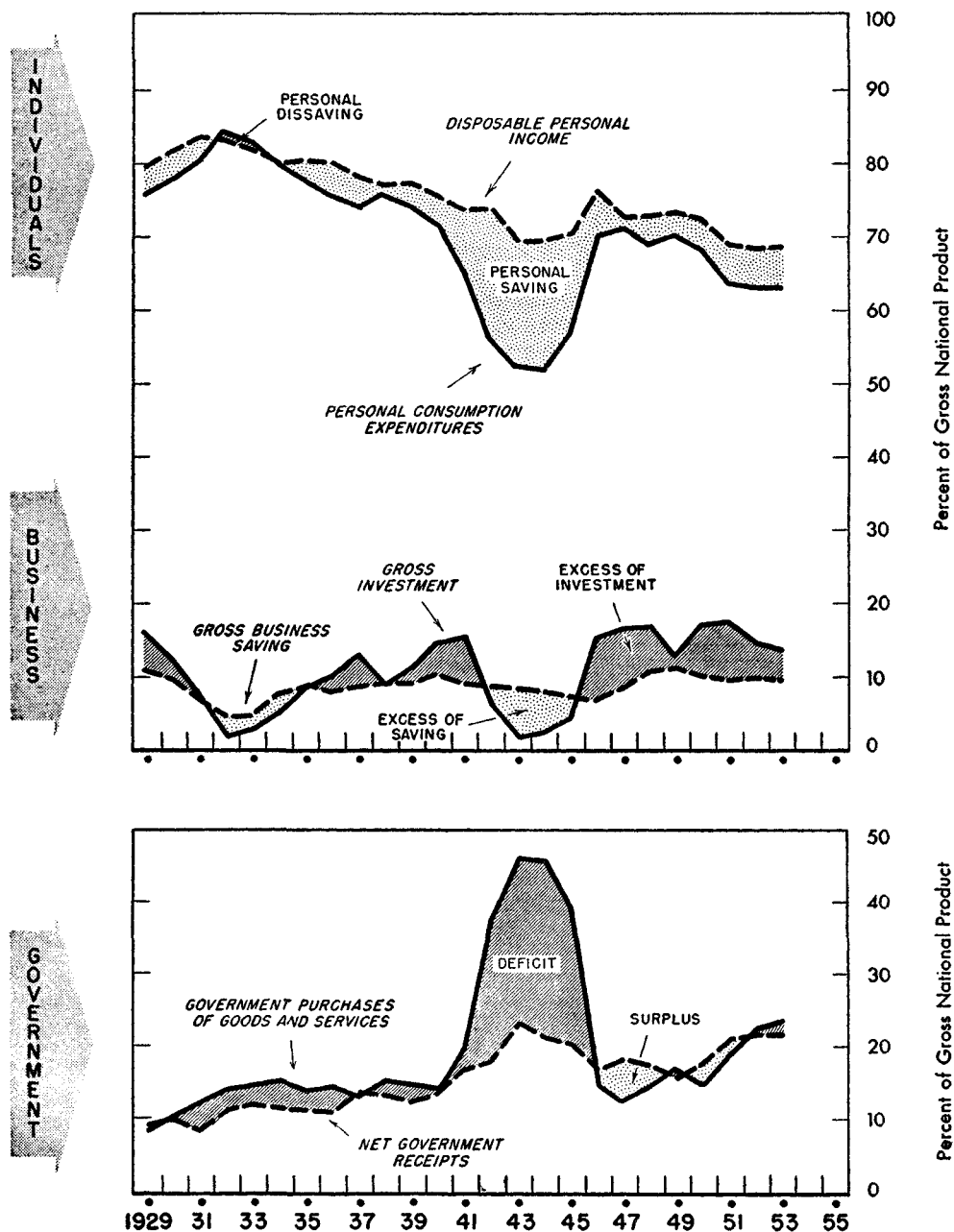
There was a break in agricultural prices early in 1948. Although these recovered briefly, their downward slide, influenced by the prospect of excellent domestic harvests and an improved crop situation abroad, was resumed after midyear. Agricultural prices are a substantial element in the total price picture, and their decline was an important factor shaping the course of economic developments during 1948.

More notable, however, was the increasing stability in consumer markets. The upsurge in personal consumption expenditures, stimulated by backlog demands and reinforced by large holdings of liquid assets and a low volume of consumer debt outstanding, had constituted one of the main foundations of the

Two Distributions of the Gross National Product

1. BY PURCHASES -- SOLID LINES
2. BY RECEIPTS -- DASHED LINES

- ▷ The sums of the receipts and expenditures are equal
- ▷ But each part of the economy does not spend what it receives.
It saves a portion or draws on the savings of others
- ▷ Shifting positions indicate the relative swings in
purchasing power and market demands



A SUPPLEMENT TO THE SURVEY OF CURRENT BUSINESS

Percentage Distributions of National Income by Distributive Shares, 1929-38

Line		1929	1930	1931	1932	1933	1934	1935	1936	1937	1938
1	Total national income.....	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
2	Compensation of employees.....	58.2	61.9	66.6	73.0	73.6	70.0	65.4	66.1	65.1	66.6
3	Wages and salaries.....	57.4	61.0	65.5	71.6	72.2	68.8	64.3	64.6	62.6	63.6
4	Supplements to wages and salaries.....	.8	.9	1.0	1.4	1.3	1.2	1.1	1.5	2.5	3.0
5	Income of unincorporated businesses.....	16.8	15.2	14.6	12.5	13.9	14.3	18.2	16.1	17.2	16.5
6	Business and professional ¹	10.0	9.8	9.3	8.0	7.9	9.3	9.4	10.1	9.6	10.1
7	Farm.....	6.8	5.5	5.3	4.5	6.1	5.0	8.8	6.1	7.6	6.4
8	Rental income of persons.....	6.2	6.3	6.3	6.4	4.9	3.5	2.9	2.7	2.8	3.8
9	Corporate profits and inventory valuation adjustment.....	11.5	8.7	2.7	-4.6	-5.0	2.2	5.1	7.7	8.4	6.3
10	Corporate profits before tax.....	11.0	4.4	-1.3	-7.1	.4	3.5	5.5	8.8	8.5	4.9
11	Corporate profits tax liability.....	1.6	1.1	.8	.9	1.3	1.5	1.7	2.2	2.0	1.5
12	Corporate profits after tax.....	9.4	3.3	-2.1	-8.0	-.9	2.0	3.8	6.7	6.4	3.4
13	Dividends.....	6.6	7.2	6.8	6.0	5.1	5.3	5.0	7.0	6.4	4.7
14	Undistributed profits.....	2.8	-4.0	-9.0	-14.0	-6.0	-3.3	-1.2	-.3	.1	-1.4
15	Inventory valuation adjustment.....	.5	4.3	4.0	2.5	-5.3	-1.3	-.4	-1.1	.0	1.4
16	Net interest.....	7.3	7.9	9.8	12.8	12.6	9.9	8.3	7.3	6.4	6.9

1. Includes noncorporate inventory valuation adjustment.

Percentage Distribution of National Income by Sector of Origin, 1929-38

Line		1929	1930	1931	1932	1933	1934	1935	1936	1937	1938
1	National income.....	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
2	Government and government enterprises.....	5.8	7.0	9.1	12.1	13.3	12.8	11.8	12.5	10.6	12.6
3	Agriculture, forestry and fisheries.....	9.4	8.2	8.2	7.8	9.2	7.6	11.2	8.3	9.8	8.7
4	Rest of the world.....	.9	1.0	.9	.9	.8	.6	.6	.6	.4	.6
5	Private nonagricultural industries.....	83.9	83.8	81.8	79.1	76.7	79.0	76.3	78.7	79.3	78.1

Percentage Distribution of Private Nonagricultural Income by Industrial Division, 1929-38

Line		1929	1930	1931	1932	1933	1934	1935	1936	1937	1938
6	Private nonagricultural industries.....	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
7	Mining.....	2.8	2.6	2.0	2.0	2.1	3.0	2.8	3.0	3.3	2.8
8	Contract construction.....	5.2	5.0	4.5	3.1	2.5	2.8	3.0	3.9	3.6	3.8
9	Manufacturing.....	29.7	28.7	25.4	21.4	24.6	28.2	30.5	31.7	33.1	28.4
10	Wholesale and retail trade.....	18.1	19.3	19.9	18.9	17.8	20.8	21.1	20.7	20.9	22.6
11	Finance, insurance and real estate.....	17.2	16.7	17.7	20.1	18.7	14.6	13.6	12.9	12.4	14.5
12	Transportation.....	9.0	8.8	8.9	9.5	9.9	8.8	8.5	8.4	7.9	7.7
13	Communications and public utilities.....	3.9	4.4	5.4	6.8	6.5	5.7	5.2	4.9	4.7	5.1
14	Services.....	14.0	14.5	16.1	18.2	18.1	16.1	15.3	14.6	14.1	15.0

Percentage Distributions of Gross National Product, 1929-38

Line		1929	1930	1931	1932	1933	1934	1935	1936	1937	1938
By type of expenditure											
1	Total.....	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
2	Personal consumption expenditures.....	75.6	77.9	80.4	84.3	82.9	79.9	77.6	75.7	74.1	75.8
3	Gross private domestic investment.....	15.5	11.3	7.2	1.6	2.5	4.4	8.7	10.2	12.9	7.8
4	Net foreign investment.....	.7	.8	.3	.3	.3	.7	-.1	-.1	.1	1.3
5	Government purchases of goods and services.....	8.1	10.1	12.1	13.8	14.4	15.0	13.8	14.3	12.9	15.0
6	Federal.....	1.3	1.5	2.0	2.5	3.6	4.6	4.0	5.8	5.0	6.2
7	State and local.....	6.9	8.5	10.1	11.3	10.7	10.4	9.7	8.5	7.9	8.8
By type of receipt											
8	Total.....	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
9	Disposable personal income.....	79.6	81.6	83.7	83.2	81.7	80.0	80.4	80.0	78.2	77.1
10	Gross business saving ¹	11.0	9.6	6.8	4.6	4.6	7.5	8.7	7.9	8.6	9.2
11	Statistical discrepancy.....	.3	-1.1	1.1	1.3	1.7	1.1	-2.2	1.4	-3.3	.5
12	Net government receipts.....	9.1	9.8	8.4	10.9	11.9	11.4	11.1	10.7	13.5	13.2
13	Federal ²	2.4	1.9	-.8	1.3	.2	.5	1.6	4.8	3.9
14	State and local ²	6.7	7.9	9.1	10.9	10.7	11.2	10.5	9.1	8.7	9.3

1. Consists of undistributed corporate profits and corporate inventory valuation adjustment, capital consumption allowances, and excess of wage accruals over disbursements.

2. Consists of personal tax and nontax receipts, corporate profits tax accruals, indirect

business tax and nontax accruals, contributions for social insurance, and current surplus of government enterprises, less subsidies, transfer payments, net interest paid, and grants to State and local governments

Percentage Distributions of National Income by Distributive Shares, 1939-53

1939	1940	1941	1942	1943	1944	1945	1946	1947	1948	1949	1950	1951	1952	1953	Line
100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	1
66.1	63.9	61.9	61.9	64.3	66.4	68.0	65.5	65.3	63.6	65.2	64.3	65.1	67.2	68.5	2
63.1	61.0	59.3	59.6	62.1	64.0	64.9	62.3	62.3	61.0	62.1	61.1	61.7	63.6	64.9	3
3.0	2.8	2.6	2.3	2.2	2.4	3.1	3.3	3.0	2.6	3.0	3.3	3.4	3.6	3.6	4
16.0	15.9	16.6	17.4	16.6	16.2	17.0	19.6	17.5	17.3	15.8	15.1	14.7	13.7	12.6	5
10.0	10.3	10.4	10.1	9.9	9.9	10.5	11.9	10.1	9.8	9.9	9.5	8.9	8.8	8.6	6
5.9	5.6	6.2	7.3	6.7	6.3	6.5	7.8	7.3	7.6	5.9	5.5	5.8	4.9	4.0	7
3.8	3.5	3.3	3.3	3.0	3.0	3.1	3.5	3.3	3.2	3.6	3.5	3.3	3.4	3.5	8
7.8	11.2	13.9	14.3	14.0	12.6	10.2	9.6	12.0	13.8	13.0	14.6	14.4	13.1	12.6	9
8.8	11.4	16.2	15.2	14.4	12.8	10.5	12.6	15.0	14.8	12.1	16.7	14.9	12.8	12.9	10
2.0	3.5	7.3	8.3	8.3	7.1	5.9	5.1	5.7	5.6	4.8	7.4	8.1	6.9	6.9	11
6.8	7.9	9.0	6.9	6.2	5.7	4.6	7.5	9.3	9.1	7.3	9.2	6.7	5.9	6.0	12
5.2	5.0	4.3	3.1	2.6	2.6	2.6	3.2	3.3	3.3	3.4	3.8	3.3	3.1	3.1	13
1.6	3.0	4.7	3.8	3.5	3.1	2.0	4.3	5.9	5.9	3.9	5.4	3.5	2.8	2.9	14
-1.0	-2	-2.4	-9	-5	-2	-3	-2.9	-3.0	-1.0	.9	-2.0	-5	.3	-3	15
6.3	5.5	4.3	3.1	2.1	1.8	1.8	1.7	1.9	2.0	2.4	2.5	2.4	2.6	2.8	16

Percentage Distribution of National Income by Sector of Origin, 1939-53

1939	1940	1941	1942	1943	1944	1945	1946	1947	1948	1949	1950	1951	1952	1953	Line
100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	1
11.7	10.7	10.0	11.9	15.9	18.5	20.3	12.6	9.4	8.9	10.1	9.8	10.9	11.8	11.4	2
8.2	7.7	8.1	9.0	8.3	7.9	8.2	9.7	9.3	9.4	7.7	7.2	7.3	6.4	5.5	3
21.4	21.4	21.3	21.3	21.2	21.2	21.2	21.3	21.4	21.5	21.5	21.5	21.6	21.5	21.5	4
79.7	81.2	81.5	78.9	75.6	73.4	71.3	77.4	80.9	81.3	81.7	82.5	81.2	81.3	82.6	5

Percentage Distribution of Private Nonagricultural Income by Industrial Division, 1939-53

1939	1940	1941	1942	1943	1944	1945	1946	1947	1948	1949	1950	1951	1952	1953	Line
100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	6
2.7	2.8	2.7	2.4	2.1	2.2	2.1	2.1	2.6	2.9	2.5	2.5	2.5	2.2	2.2	7
4.0	3.9	4.9	6.0	4.2	3.1	3.3	4.7	5.3	5.7	5.9	5.8	6.0	6.1	6.0	8
30.9	33.7	38.7	41.8	45.2	44.9	40.2	34.9	36.8	37.0	35.5	37.5	39.0	38.0	38.6	9
21.6	21.6	20.2	18.7	18.5	19.2	21.7	24.7	23.4	23.1	22.9	21.9	21.3	21.5	20.8	10
13.7	12.4	10.7	9.8	9.0	9.1	9.9	10.4	9.6	9.6	10.7	10.4	10.0	10.3	10.5	11
8.1	7.6	7.4	7.9	8.4	8.4	8.2	7.4	7.2	7.0	6.8	6.7	6.6	6.6	6.4	12
4.9	4.6	3.9	3.4	3.1	3.0	3.3	3.4	3.2	3.3	3.7	3.6	3.7	3.9	4.0	13
14.3	13.4	11.6	10.1	9.5	10.2	11.3	12.4	11.9	11.4	12.0	11.5	11.0	11.3	11.5	14

Percentage Distributions of Gross National Product, 1939-53

1939	1940	1941	1942	1943	1944	1945	1946	1947	1948	1949	1950	1951	1952	1953	Line
100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	1
74.2	71.4	65.1	56.4	52.2	52.0	57.0	70.1	71.0	69.0	70.2	68.1	63.5	63.1	63.1	2
10.2	13.1	14.4	6.2	2.9	3.4	4.9	13.0	12.8	16.0	12.6	18.0	17.3	14.6	14.1	3
1.0	1.5	.9	-.1	-1.2	-1.0	-.7	2.2	3.8	.8	-.2	-.8	.1	-.5	-.5	4
14.6	14.0	19.7	37.5	46.0	45.7	38.8	14.8	12.3	14.2	17.0	14.7	19.1	22.3	23.4	5
5.7	6.1	13.4	32.7	42.2	42.1	35.0	10.0	6.8	8.2	9.9	7.8	12.5	15.6	16.5	6
9.0	7.9	6.2	4.8	3.8	3.6	3.8	4.8	5.5	6.0	7.1	7.0	6.6	6.7	6.9	7
100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	8
77.3	75.6	73.9	73.8	69.4	69.4	70.4	76.1	72.8	72.9	73.1	72.3	68.9	68.4	68.5	9
9.1	10.3	9.1	8.9	8.5	8.1	7.3	6.7	8.6	10.6	11.1	10.0	9.7	9.9	9.6	10
1.3	.8	.3	-.5	-.9	1.3	2.1	.4	.6	-.8	.0	.1	.4	.2	.3	11
12.3	13.3	16.7	17.8	23.1	21.1	20.2	16.8	18.0	17.3	15.7	17.6	21.0	21.5	21.5	12
3.2	4.7	9.4	11.8	17.9	16.3	15.2	11.0	12.1	11.3	9.0	11.0	14.5	14.8	14.6	13
9.1	8.6	7.3	6.0	5.1	4.8	5.0	5.7	6.0	6.0	6.8	6.6	6.5	6.7	6.9	14

3. Consists of personal tax and nontax receipts, corporate profits tax accruals, indirect business tax and nontax accruals, contributions for social insurance, current surplus of

government enterprises, and Federal grants-in-aid, less transfer payments and net interest paid.

Selected Per Capita Income and Product Series in Current and Constant (1947) Dollars, 1929-38

Line		1929	1930	1931	1932	1933	1934	1935	1936	1937	1938
Current dollars											
1	Gross national product.....	857	740	614	468	445	514	509	646	704	656
2	National income.....	720	615	481	341	320	367	448	506	571	520
3	Personal income.....	704	624	529	401	376	424	473	534	573	527
4	Disposable personal income.....	682	604	514	389	364	411	458	517	551	505
5	Personal consumption expenditures.....	648	576	494	395	369	410	442	488	522	497
Constant (1947) dollars											
6	Gross national product.....	1,225	1,098	1,020	861	825	867	1,003	1,112	1,190	1,123
7	Disposable personal income ¹	927	859	822	703	670	725	792	888	913	858
8	Personal consumption expenditures.....	880	819	789	711	689	723	764	839	865	845
9	Addendum: Population (thousands) ²	121,881	123,188	124,149	124,949	125,690	126,485	127,362	128,181	128,961	129,969

1. This series was obtained by dividing current-dollar disposable personal income by the implicit deflator for personal consumption expenditures shown in table 41, Part V.

2. Continental United States including Armed Forces abroad, as of July 1.

boom. As the more urgent backlog demands were satisfied, and as the abnormally high spending rate of 1947 made inroads into the net liquid asset positions of many consumers, the rising trend of consumption flattened out in the latter part of 1948.

Closely allied with this tapering-off was the appearance of substantial inventory accumulations, prevented in 1947 largely by the intensity of consumer demand. These related developments, more than any others, slowed the price rise and brought the inflationary spiral to an end during 1948. Late that year, there came a general downturn in prices, and the postwar economy entered a new phase.

Business readjustment and recovery: 1949-50

Businessmen adopted more cautious buying policies toward the end of 1948, and the large inventory accumulations of that year were sharply reduced in the first quarter of 1949. Substantial inventory liquidation emerged in the next quarter, and the drain upon stocks persisted during the remainder of the year. The shift in the inventory position was reflected in a curtailment of production mainly in the manufacturing industries, where the bulk of all inventories held in the economy is produced.

By contrast, total final purchases—that is, elements of the gross national product other than the change in inventories—held up extremely well during 1949. Consumer spending in the first quarter dropped but slightly below its dollar volume at the crest of the postwar boom, then climbed slowly upward again during the remainder of the year. Residential building activity decreased from a peak in the second quarter of 1948 but picked up again in the spring and advanced strongly thereafter. And government purchases, chiefly because of the expanding Federal foreign aid and farm price support programs, more than offset the moderate declines which occurred in business outlays for plant and equipment. For the year as a whole, total final purchases actually exceeded those of 1948.

That the curtailment of employment and payrolls in the manufacturing sector had no greater impact upon consumption expenditures in 1949 was attributable in part to the payment of sizable unemployment compensation benefits, and also in some degree to the cushioning effects upon disposable personal income of lower Federal income taxes as a result of the previous year's Revenue Act. It may also be noted that dividends were sustained, notwithstanding the sharp fall in profits. Perhaps more important

than any of these factors, however, was the apparent willingness of the consuming public as a whole to spend increasing proportions of current income to maintain living standards during the recession.

It became apparent in the second half of 1949 that the curtailment of output had been excessive in relation to the existing stable volume of business sales. Accordingly, production was stepped back up, and the accumulation of inventories was resumed. Meanwhile, the recovery of residential construction had grown into a sustained building boom, and consumer demand, already strong, was being bolstered by large Government payments to veterans. These factors, moreover, were being reinforced by a renewed upturn in fixed business investment.

This widening resurgence of production generated increases in employment and incomes, adding further impetus to consumer purchasing. Before mid-1950, a business upswing of substantial dimensions was under way and was carrying the economy close to full-capacity operation.

Korean war period

It was upon this expansionary situation that the urgent demands resulting directly and indirectly from the outbreak of hostilities in Korea were superimposed, as the Nation decided upon a defense program encompassing a sharp step-up in direct military potential as well as the establishment of a broad base of productive facilities to permit quick economic mobilization in case of full-scale war.

The ensuing rise in national output continued without interruption for three years, until the second quarter of 1953, when gross national product reached a peak of \$370 billion at seasonally adjusted annual rates, one third above the rate of \$276 billion in the second quarter of 1950. About half of this rise represented expansion in physical volume while the remainder reflected the sharp advance in prices which occurred in large part during the first nine months of the period.

In terms of current dollars, Federal Government purchases, mainly for national security purposes, accounted for more than two-fifths of the increase in national output. These purchases tripled over the three-year period, and their share of total output rose from 8 to 17 percent. All other types of national expenditure combined rose by about one-fifth, with consumption, invest-

Selected Per Capita Income and Product Series in Current and Constant (1947) Dollars, 1939-53

1939	1940	1941	1942	1943	1944	1945	1946	1947	1948	1949	1950	1951	1952	1953	Line
695	762	943	1,180	1,408	1,527	1,526	1,480	1,611	1,755	1,725	1,879	2,126	2,204	2,286	1
555	618	785	1,021	1,246	1,320	1,295	1,270	1,368	1,512	1,449	1,582	1,795	1,853	1,911	2
556	596	722	916	1,107	1,197	1,224	1,259	1,322	1,424	1,386	1,497	1,654	1,727	1,792	3
538	576	697	871	977	1,060	1,075	1,126	1,173	1,279	1,261	1,359	1,465	1,509	1,667	4
516	544	614	665	735	794	870	1,037	1,145	1,211	1,211	1,279	1,350	1,391	1,441	5
1,202	1,299	1,486	1,658	1,820	1,938	1,880	1,654	1,611	1,663	1,619	1,745	1,833	1,874	1,921	6
925	981	1,113	1,245	1,277	1,312	1,282	1,247	1,173	1,211	1,203	1,280	1,290	1,306	1,339	7
888	927	981	950	961	982	1,038	1,149	1,145	1,146	1,155	1,205	1,189	1,205	1,222	8
131,028	132,122	133,402	134,860	136,739	138,397	139,928	141,389	144,126	146,631	149,188	151,683	154,360	157,022	159,629	9

ment, and State and local government outlays each registering substantial gains.

In real terms the shifts in the use of output were more pronounced, with the Federal Government absorbing about two-thirds of the increase in constant-dollar gross national product. But on this basis also a margin was left which permitted an expansion in other purchases in spite of the increased demands of national security. Total real consumption was about 9 percent higher in mid-1953 than three years earlier, reflecting mainly a larger volume of nondurable goods and services. On a per capita basis the increase amounted to more than 3 percent. Real purchases of State and local governments showed a similar movement. The rate of aggregate investment decreased somewhat in real terms, although fixed investment was higher, due to a larger volume of producers' durable equipment.

Inflationary upsurge

While the defense buildup was the dominant factor in the economic situation throughout the three years following mid-1950, its character and impact varied considerably during this period.

In the initial stage the increase in national security expenditures was heavily concentrated in military payrolls, food, clothing, and other related outlays which were capable of rapid expansion in a comparatively short time. The strength of the Armed Forces increased by 1¼ million persons in the first year of the defense effort—about four-fifths of the ultimate total increase—and national security outlays mounted from 6 percent to 11 percent of the gross national product.

At the same time there was a strong advance in investment by businesses that were participating in the growing volume of defense orders. This included investment in inventories and in plant and equipment, the latter receiving a special stimulus from the rapid amortization provisions that had been granted for emergency facilities.

Although the demands stemming directly from the defense program contributed to expansionary developments, it was the waves of anticipatory buying, set in motion by the expectation of commodity shortages and price increases, that determined the tone of the business situation in this period. Consumer buying spurted in the third quarter of 1950 and again in the first quarter of 1951, following the further extension of the Korean conflict. Responding

to sharply rising sales, as well as to the same expectations that motivated consumers, businessmen added greatly to their inventories, and fixed investment not related to the defense program was also stimulated.

Although production continued to rise briskly, demand outstripped the supply of goods, and prices bounded upward.

Shift to defense production

By mid-1951 the situation had changed significantly. Output was expanding at a rapid rate, and it became apparent that the productive capacity of the economy had been underestimated. Taxes had been raised, and the establishment of price and wage controls gave some assurance to the public that inflation would be kept in check. Other measures, including controls on credit and on the flow of strategic materials, had been introduced to ensure that the necessary resources would be channeled in an orderly fashion into the defense program.

As a consequence of these developments, and the well-stocked position of consumers after several months of extraordinarily heavy buying, spending propensities eased markedly during 1951. The rate of consumer spending out of disposable income, which had risen to 96 percent during the buying surge in the first quarter fell to about 91 percent in the succeeding quarters of the year. Since the trend of income was strongly upward, the absolute dollar value of consumption in the final quarter of the year exceeded the first-quarter rate in spite of this decline in the spending rate.

The easing in the urgency of consumer demand was paralleled by a curtailment of business buying, which had been geared to the same sort of anticipations and to the resultant abnormal volume of sales. The shift entailed a very substantial inventory readjustment—with a notable scaling down in the accumulation of civilian goods.

In the setting of rapidly increasing physical production, of Government measures designed to minimize the disruptive effects of economic mobilization upon the economy, and of less urgent private demand, it was possible to achieve a substantial expansion in national defense expenditures and allied fixed capital outlays concurrently with a high rate of civilian consumption and a diminution of inflationary pressures.

The absolute increase in national security expenditures in the

second year of the defense buildup was nearly as large as in the previous year although the percentage increase was smaller. It was concentrated in hard goods, such as planes, tanks, and electronic equipment. Deliveries of these items were reaching a high volume, after design difficulties had been overcome and the long lead-time involved in their production had elapsed. Defense-connected fixed investment also expanded rapidly in this period. In contrast, the advance in total fixed investment was limited by offsetting declines in investment not related to the defense effort.

General expansion

In the third year of the defense effort—from mid-1952 to mid-1953—the Nation's capacity to produce continued to expand substantially while the rate of growth of national security outlays tapered off. This shift in the relation of supply and demand permitted the relaxation and subsequent removal of economic controls.

Civilian demand proved strong, particularly in the durable goods lines previously restricted by controls and material shortages. Residential, institutional, and State and local construction, business investment in plant and equipment other than in defense-connected industries, and consumer and inventory demand for automobiles and other durable goods became major factors supporting further economic growth. Together with the still rising military demand they provided the basis for a balanced economic expansion which, unlike that of the previous year, was shared by most industries.

Agriculture was the principal sector of the economy that ran counter to the generally favorable trend. As a consequence of lower farm prices, income originating in agriculture was reduced substantially during 1952 and 1953. The steady downward pressure on prices reflected the unusually heavy output of farm products—which reached successive highs in the 2 years—and the appreciable decline in foreign sales. Domestic consumption remained firm, however, and the full force of the other develop-

ments was not reflected in farm income, as large quantities of the chief crops and dairy products were placed under loan to the Commodity Credit Corporation, both in 1952 and 1953.

The restoration of civilian durable goods production was retarded by the steel strike which occurred in the second quarter of 1952 and affected end products mainly in the third. As a consequence final purchases and inventory accumulation of durables were particularly heavy in the fourth quarter of 1952 and were probably raised also in the opening half of 1953.

National output reduced

Total production reached a peak in the second quarter of 1953 and receded moderately in the latter half of the year. The major change occurred in the net flow of goods into the inventories of durable goods industries. These inventories had been replenished and the immediate need for further accumulation had thus been removed. In addition, sizable liquidations were made when it became apparent that, relative to actual and prospective demand, some of the earlier build-up had been excessive.

National security expenditures, entering a new phase, registered moderate declines, mainly in the procurement of hard goods, and consumer purchases of commodities, particularly durables, also drifted downward. The effect of these reductions on total final purchases was offset, however, by advances in other components of national expenditures, notably consumer expenditures for services, State and local government purchases, and the agricultural price support outlays of the Federal Government. Hence final purchases were maintained in the aggregate in the latter half of 1953.

While the percentage decline in total national output was small, it was heavily concentrated in durable goods and thus had a disproportionate impact upon the durable goods manufacturing industries where it led to substantial reductions in production, employment, wages, and profits. The year 1954 opened with these developments still in progress.